



**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

# **CH-47**

---

# **accident**

---

# **summary**

MAJORS, MINORS, INCIDENTS,  
FORCED LANDINGS, PRECAUTIONARY LANDINGS

## CH-47 ACCIDENT SUMMARY

1 July 1966 through 30 June 1967

by  
P. R. Thompson

Education and Literature Division



COLONEL RUSSELL P. BONASSO  
Director

## INDEX

|  |    |
|--|----|
| INTRODUCTION.....                              | 1  |
| STATISTICS.....                                | 1  |
| CAUSE FACTORS.....                             | 1  |
| CONCLUSIONS.....                               | 2  |
| SELECTED MAJOR ACCIDENT BRIEFS.....            | 3  |
| SELECTED MINOR ACCIDENT BRIEFS.....            | 5  |
| SELECTED INCIDENT BRIEFS.....                  | 5  |
| SELECTED FORCED LANDING BRIEFS.....            | 6  |
| SELECTED PRECAUTIONARY LANDING BRIEFS.....     | 6  |
| COMPONENT REPLACEMENT RETIREMENT SCHEDULE..... | 8  |
| ACTIVE MWO's.....                              | 22 |
| NONACTIVE MWO's.....                           | 55 |
| TABLE 1 - Mishap Classification.....           | 1  |
| TABLE 2 - Accident Rates.....                  | 1  |
| TABLE 3 - Mishap Cost.....                     | 2  |
| TABLE 4 - Occupant Injuries.....               | 2  |

# CH-47 Accident Summary

1 JULY 66 THROUGH 30 JUNE 67

## INTRODUCTION

This summary was prepared to help commanders at all levels, aviation safety officers, maintenance officers, aviators, and related aviation personnel to prevent future accidents and preserve combat resources through a review of CH-47 mishaps and their cause factors. The term "mishap," as used in this summary, includes accidents, incidents, forced landings, and precautionary landings, as defined by paragraph 7, AR 385-40. Aircraft losses or damages which were the direct result of hostile action in RVN are not included. Information presented in this summary was taken from accident and other mishap reports submitted from all Army commands, as required by section IV, AR 385-40. Information on Modification Work Orders (MWO's) was furnished by USA-AVCOM.

## STATISTICS

Table 1 shows total CH-47 mishaps from the time of the introduction of the helicopter into the Army inventory through FY 1967. While major and minor accidents each were up three for FY 1967, the accident rate per 100,000 flying hours, shown in table 2, decreased 5.2 since FY 1966. The accident rate has decreased 57.1 overall since CH-47 aircraft entered the inventory.

Incidents, mishaps resulting in damage which does not meet accident classification criteria, were up 6

(17%) during FY 1967. The increased cost of accidents and incidents, up \$4,212,000 (55%) over FY 1966, is shown in table 3. CH-47 mishap costs accounted for about 12% of the \$96,000,000 total costs of all Army aircraft mishaps during FY 1967.

Table 4 shows the number of occupants aboard for all accidents and the number sustaining fatal and nonfatal injuries. Of the 15 FY 1967 accidents, 80% (12) were survivable. Overall, 84% (31) of 37 accidents were survivable. Two of 119 occupants in survivable accidents were killed.

## CAUSE FACTORS

The majority of Army aircraft accidents involve pilot factors. This is true also for the CH-47, evidenced by the FY 1967 major and minor accident briefs presented in this summary. The majority of total mishaps, however, resulted from failures and malfunctions, illustrated by the incident, precautionary landing, and forced landing briefs, selected as representative samples of the most frequently recurring types and their cause factors. Mishap cause factors included were crew error, inadequate and improper maintenance, inadequate facilities, inadequate supervision, weather, materiel malfunction, and inadequate unit training.

Cause factors for many mishaps are reported as "suspected" or "unknown." This is particularly true for incidents, forced landings, and precautionary

TABLE 1  
CH-47 Mishap Classification

| FY    | MAJ | MIN | INCD | F/L | P/L | TOTAL |
|-------|-----|-----|------|-----|-----|-------|
| 1963  | 3   | 0   | 4    | 12  | 0   | 19    |
| 1964  | 4   | 1   | 2    | 7   | 18  | 32    |
| 1965  | 6   | 0   | 5    | 4   | 51  | 66    |
| 1966  | 9   | 0   | 35   | 10  | 65  | 119   |
| 1967  | 12  | 3   | 41   | 22  | 98  | 176   |
| TOTAL | 34  | 4   | 87   | 55  | 232 | 412   |

TABLE 2  
CH-47 Accident Rates Per 100,000 Flying Hours

| FY    | NO. OF ACDTS | HR. FLOWN | RATE |
|-------|--------------|-----------|------|
| 1963  | 1            | 1,384     | 72.2 |
| 1964  | 3            | 5,557     | 54.0 |
| 1965  | 2            | 13,519    | 14.8 |
| 1966  | 9            | 44,337    | 20.3 |
| 1967  | 15           | 99,430    | 15.1 |
| TOTAL | 30           | 164,227   | 18.3 |

**TABLE 3**  
Approximate CH-47 Mishap Dollar Cost

| FY           | WORLD-WIDE<br>LESS RVN | RVN                 | TOTAL               |
|--------------|------------------------|---------------------|---------------------|
| 1963         | \$ 99,000              | 0                   | \$ 99,000           |
| 1964         | 3,792,000              | 0                   | 3,792,000           |
| 1965         | 2,923,000              | 0                   | 2,923,000           |
| 1966         | 1,192,000              | \$ 6,460,000        | 7,652,000           |
| 1967         | 123,000                | 11,741,000          | 11,864,000          |
| <b>TOTAL</b> | <b>\$8,129,000</b>     | <b>\$18,201,000</b> | <b>\$26,330,000</b> |

landings. For an effective safety program, specific cause factors must be known. Insufficient information or lack of supplemental information about specific cause factors results in wasted effort, time, and resources.

The chance to gain prevention information from forced and precautionary landings is much greater than that for other mishaps because the crews involved in these were able to successfully cope with inflight emergencies and land without damage. If the full circumstances that brought about the emergencies and the techniques used to cope with them could be shared and learned by all, Army aviators would be in a far better position to prevent accidents resulting from similar factors.

## CONCLUSIONS

A concerted effort on the part of commanders and supervisors at all levels is needed to achieve a more effective safety program. This can best be accomplished through:

*Knowledge* of past mishap experience and cause factors, available through aircraft accident summaries such as this, Weekly and Monthly Accident Summaries, and the Crash Sense Department of the U. S. ARMY AVIATION DIGEST. Distribution of Weekly and Monthly Accident Summaries may be obtained by writing to: Director, USABAAR, ATTN: ELD, Fort Rucker, Alabama 36360. Distribution of the U. S. ARMY AVIATION DIGEST may be obtained by submitting DA Form 12-4 in accordance with instructions on the back of the form.

*Prevention Surveys* conducted on a revolving basis to isolate potential hazards in facilities, equipment, and personnel. Copies of the Aircraft Accident Prevention Survey prepared by USABAAR may be obtained by writing to: Director, USABAAR, ATTN: ELD, Fort Rucker, Alabama 36360.

*Effective Prevention Planning*, as outlined in part 1, AR 95-5.

*Implementation of Unit Safety Programs*, as outlined in appendix VI, AR 95-5.

*Increased Command Emphasis* on investigation and reporting of incidents, forced landings, and precautionary landings, to include *all* information required by paragraph 23e, AR 385-40.

**TABLE 4**  
CH-47 Occupant Injuries

| FY    | Acdts |    | Occupants             |    |          |      |                         |                        |
|-------|-------|----|-----------------------|----|----------|------|-------------------------|------------------------|
|       |       |    | Injury Classification |    |          |      | Total on Board Aircraft |                        |
|       |       |    | Fatal                 |    | Nonfatal | None | Survivable<br>Acdts     | Nonsurvivable<br>Acdts |
|       | S     | NS |                       |    |          |      |                         |                        |
| 1963  | 3     | 0  | 0                     | 0  | 0        | 12   | 12                      | 0                      |
| 1964  | 4     | 0  | 0                     | 0  | 3        | 10   | 13                      | 0                      |
| 1965  | 5     | 1  | 1                     | 3  | 1        | 14   | 16                      | 3                      |
| 1966  | 7     | 2  | 2                     | 27 | 23       | 22   | 47                      | 27                     |
| 1967  | 12    | 3  | 2                     | 22 | 37       | 80   | 119                     | 22                     |
| TOTAL | 31    | 6  | 5                     | 52 | 64       | 138  | 207                     | 52                     |

S - Survivable  
NS - Nonsurvivable

## Selected Major Accident Briefs

**F457**—During a reconnaissance and firing mission, engine torque needles spun rapidly before second firing run and No. 2 engine egt was 750° and rising. Firing run was continued, since no warning lights came on and there was no indication of any other trouble. No. 2 egt increased to maximum and fire started in engine. Fire bottle was activated, but failed to extinguish fire. No. 2 engine was shut down and torque needle of No. 1 engine stabilized at 900 pounds torque. A forced landing was made with a descent of 500 fpm, at 60-70 knots, with a full flare to lessen forward speed and reduce the rate of descent. Thrust was applied and rotor rpm was reduced to about 190 to clear trees and high stumps. Aircraft landed hard, damaging fuselage and structural bulkheads. Caused by failure of No. 2 engine while operating at a gross weight in excess of single engine capability over unsuitable landing terrain. No. 2 engine fuel control was improperly adjusted by unqualified personnel during delivery processing. Fuel control was adjusted so that N<sub>2</sub> power lever traveled 22° minimum to 85° maximum. It should have been 13°-17° minimum to 75° maximum. This resulted in excessive fuel flow and caused engine damage, failure, and fire. Engine had 50-hour history of high egt's and control malfunctions.

**F751**—Ground contact was lost due to 200-foot overcast with jagged scud during night evac takeoff. Searchlight was turned off to reduce glare and artificial horizon was interpreted to indicate nose low attitude. Nose was raised, power reduced, and searchlight turned on again to attempt to establish ground reference. Nose continued to pitch up as aircraft began descending and accelerating rearward and downward. Aft blades struck tree and aircraft skidded 15 feet on aft wheels and right side of ramp before pitching near vertical. Ramp gouged a 24-inch hole in ground. Aircraft arched over backward, nose over tail, with right side slightly low, hitting ground

with upper right side of each rotor head. Aft pylon separated and aircraft rolled on right side. Litter patient and one passenger were killed. Four crewmembers and four passengers sustained major injuries, and one crewmember had critical injuries. Caused by noninstrument-rated pilots taking off into instrument flight conditions.

**F949**—Forward rotor blades of taxiing aircraft struck aft rotor blades of parked CH-47. Aircraft became airborne to about 16 feet and spun to right. Forward transmission and mast separated from aircraft, aft section split from main portion of cargo area, and aircraft fell on right side, breaking in half. Parked aircraft sustained major damage to skin of aft pylon and aft and center cabin sections and to hydraulic plumbing. One crewmember sustained major injuries and six sustained minor injuries. Caused by (1) taxiing too close to parked aircraft, (2) lack of parking spots and ground guides, (3) inability of guide to converse with AC on interphone, and (4) lack of individual initiative and team effort in recognizing and reacting to a dangerous situation.

**G497**—No. 1 engine failed during climbout while sling loading M-102 and water blivet. Restart attempt was unsuccessful and sling load could not be released by means of cyclic stick button or overhead emergency release switch. Aircraft settled on sling load during touchdown, damaging skin on underside. Aft rotor blades hit tree, breaking blades and ripping aft transmission and pylon loose. Forward blades struck tree, damaging blades. Caused by crew failing to use all emergency procedures (manual release of D-ring) to jettison sling load. Cause of engine failure unknown pending teardown analysis.

**H225**—Aircraft disintegrated at about 3,000 feet, separating into two flaming parts before striking ground. All five crewmembers killed. Caused by failure to safety upper nut on pin attaching aft speed trim actuator to swashplate and by improper technical inspection of aft speed trim actuator after removal and installation. The loss of upper longitudinal speed trim actuator bolt from aft rotor swashplate attaching lug caused aft swashplate, controlling aft rotor blades, to become unstable. This caused extreme flapping of aft rotor blades, allowing blades to strike fuselage and break off. Unbalance of rotor head caused aft pylon to separate in flight.

**011506**—Aircraft disintegrated in air. Six crew-

052218-Aircraft vibrated during right turn at 3-foot hover and landed with left gear off pad.

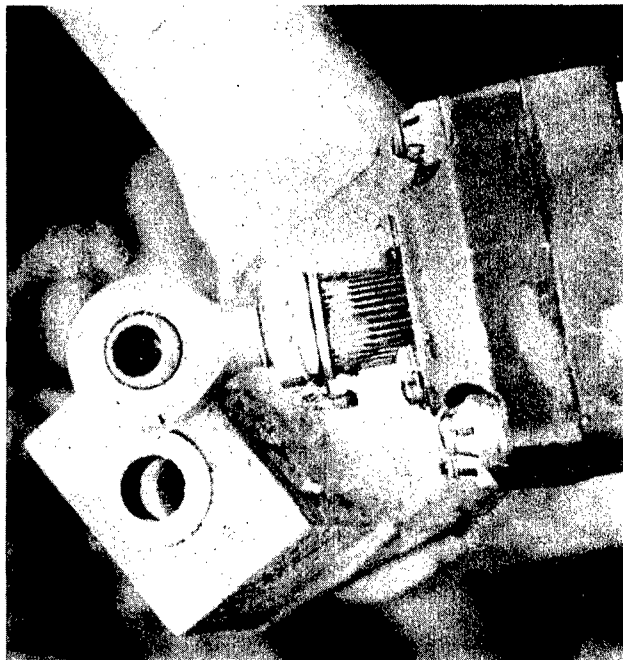


members and three passengers killed. Caused by fatigue failure of spar of one aft rotor blade at station 200.5.

020104-Rotor rpm decreased during takeoff with internal load of 40 troops, and pilot tried to increase rpm with beep trim. Thrust was decreased without increasing rpm. Thrust was applied just before touch-down to cushion landing. Right aft and left forward gear touched down on edge of 10-foot embankment, and aircraft moved forward and to left, rolling off embankment. Aircraft settled on upper left side, damaging forward underside of fuselage, rotors, transmissions, and No. 1 engine, and buckling skin on upper left and right sides of fuselage. Probably caused by attempting uphill takeoff over rough terrain with aircraft at or near maximum gross weight.

031621-Aircraft was landed to pick up internal load. Cyclic was inadvertently pushed forward, raising aft gear off ground and allowing ramp to drop below aft wheel level. Aft cyclic was applied and ramp jammed into ground. Caused by (1) failing to insure cyclic stick was in "neutral" and thrust lever was in "3° detent" position, (2) failing to insure ramp control lever was in "stop" position, and (3) rapidly applying aft cyclic.

062506-Excessive power was required for acceleration and climb and pilot elected to return to take-off site. Smoke was noted in aft pylon and forced landing initiated. Master caution light came on three times during descent and 230 rotor rpm could not be maintained. Thrust was applied on touchdown, decaying rpm to 190. Crew cleared aircraft and aft pylon burned through and fell away, allowing ruptured main fuel lines to feed fire. Internal ammunition load exploded, destroying aircraft. Cause of accident unknown due to destruction of aircraft. Suspect failure of aft vertical shaft thrust bearing.



011506-Fatigue failure of aft rotor blade spar caused aircraft to disintegrate during flight.



H225-Loss of upper longitudinal speed trim actuator bolt from aft rotor swashplate attaching lug caused by failure to safety upper nut on pin.

## Selected Minor Accident Briefs

**G221**—Droop stop bumping occurred during test flight. Aircraft was landed at home base and shut down. As rotors slowed to about 30 rpm, aft blades struck fuselage, damaging left side outer skin, stringers, and formers. Caused by droop stop failure on aft rotor. Accident investigation board recommended that rotor heads be modified to incorporate new centrifugal droop stops.

**031802**—Brakes were locked, thrust lever lowered, and controls centered while off-loading troops. SAS was flipped to "release" position and rotor rpm dropped to minimum. Aircraft tipped forward after troops were off-loaded. As cyclic was pulled to full aft position, bottom front of aircraft and forward rotor blades struck ground and aircraft turned right and vibrated violently. Engine condition lever was pulled

to "stop" and aircraft continued turn, stopping approximately 330° from original heading. Minor damage to right front landing gear, fuselage, forward rotor blades, antenna, pylon, and plexiglass. Seat cushions of both seats in cockpit came loose. Caused by either inadvertently placing controls forward while pilots were directing attention to map, or by failing to put control centering switch in "on" position after landing, and then momentarily releasing cyclic.

**052218**—Medium-to-high frequency vibration felt during right turn at 3-foot hover. Aircraft was landed on pad with aft left gear in drainage ditch approximately 1 foot below pad, and unmarked warning light came on. Controls were centered and both engine condition levers moved to "ground." Aft rotor blades struck tunnel cover and fuselage, causing hole in skin. Warning light was "wheel dephase" warning light and was not properly identified. Caused by (1) landing aircraft with high tailwind, (2) landing with aft left gear off pad, (3) landing with swivel locks in "unlocked" position, making control extremely difficult, (4) operating in downwind condition due to placement of sandbag barriers, (5) materiel failure of droop stops, allowing blades to strike fuselage, and (6) lack of proper warning lights.

---

## Selected Incident Briefs

**G126**—Sling-loaded 105 Howitzer tipped forward when set down. Aircraft drifted forward and trails punctured fuselage, damaging skin aft of cargo hatch. Improper rigging and lack of crew coordination were factors.

**G369**—Bird hit left windshield, causing incident damage.

**G421**—Hoist pulley broke loose from mounting point while hoisting equipment from small clearing. Cable snapped and whipped inside aircraft, tearing soundproofing and damaging floor and overhead stringer. Pulley failure caused by overload.

**G644**—Right pilot emergency exit came off, damaging exit. Suspect inadequate engagement of retaining mechanism.

**G711**—Clevis attaching metal cable to nylon strap broke while lifting sling load, and stretched strap shot clevis upward into bottom of aircraft, damaging aircraft bottom.

**G741**—Aft rotor struck tree limb during maximum gross load approach to confined area, damaging aft blade.

**H041**—No. 1 engine lower cowling came loose, damaging cowling. Suspect failure of cowling hatch.

**H080**—Aft rotor tip caps hit tree during approach to

confined area, damaging tip caps. Caused by excessive flare during termination of approach.

**H296**—Rotorwash sucked overhanging limbs down into aft rotor during takeoff from confined area, damaging aft rotor blades.

**H394**—Rear wheels slid on wet PSP during left turn to parking area, causing forward main rotor tip caps to strike aft tail section of parked CV-2, damaging tip caps of taxiing aircraft and tail section of CV-2. Gusty winds and rain considered factors.

**H483**—Aircraft was on ground waiting to be loaded when 1/4-ton truck hit forward rotor blades, damaging blades.

**H592**—Severe vertical and lateral vibrations were felt on short final. Pitch was bottomed at approximately 10-20 feet due to lack of control and aircraft landed hard, damaging rear landing gear and fuselage. Fluctuation of No. 1 generator output voltage caused SAS links to oscillate.

**010606**—Troops were being off-loaded in LZ when smoke grenade tossed from overhead UH-1 struck rotor blades of CH-47, causing 1-inch hole.

**011117**—During drop of 250-gallon external water blivet, load rolled forward, causing hook to strike utility hydraulic quick disconnect, severing quick disconnect from hydraulic line and rendering utility system inoperative. Incident damage to quick disconnect.

**011614**—Pilot inadvertently released cyclic control of parked aircraft while centering switch was in

"off" position, and aircraft nosed over, damaging chin bubble and skin on underside of nose section.

**030817**—Aft rotor blades struck telephone pole wire during ground taxi to parking slot, damaging two aft rotor blades and three blade caps.

**032705**—No. 1 tunnel cover flew off into forward red blade, damaging No. 1 and No. 2 tunnel covers and forward red blade. Caused by latch failure.

**041305**—Tube of 105 Howitzer punctured hole in left fuel cell pod during external pickup, damaging pod.

**050502**—Aft gear struck rock during approach to mountain helipad, damaging aft landing gear.

**052105**—As aircraft was being shut down, rotor-wash from another aircraft caused rotor blade to flex down and hit transmission tunnel, damaging blade tip and tunnel cover.

**062108**—Red blade droop stop lost from aft rotor head, damaging aft main rotor blade, aft rotor hub, aft rain shield, and aft pylon skin. Caused by failure of droop stop retaining bolts.

## Selected Forced Landing Briefs

**G013**—Oil leak noted in forward transmission. Caused by failure of helicoil on stud retaining oil filter to transmission.

**G036**—No. 2 engine flamed out at about 50 feet and 25 knots after takeoff. Caused by ingestion of heavy wrapping paper into air intake, restricting airflow.

**G132**—Forward transmission lost oil. Caused by stripped threads on oil filter retaining bolt. Suspect overtorqued bolt.

**G652**—No. 1 generator came off line and would not reset. Smoke poured out of d.c. compartment on left forward side of aircraft. Caused by failure of 24-volt storage battery.

**G781**—Oil lost from forward transmission. Caused by overtorqued retaining studs.

**H083**—No. 2 hydraulic boost lost power. Caused by failure of preformed packing of aft upper boost actuator "B" nut.

**H658**—No. 1 transmission warning light came on and No. 1 torque dropped. Crew heard explosive sound and felt unusual vibration. Caused by failure of output shaft bearing in No. 1 engine transmission.

**010702**—No. 2 engine flamed out. Caused by defective fuel control.

**021509**—Loud banging noise heard from forward section. Caused by failure of forward transmission.

**041405**—Pilot felt heavy one-per-revolution vibration and aircraft pitched. Caused by separation of

4-6 inches of No. 11 pocket from spar on aft yellow blade.

**040709**—Loud banging noise was heard from engine area and aircraft vibrated. Caused by failure of first stage compressor blades.

**051019**—Unusual noise heard from aft transmission. Hydraulic tube came loose from No. 2 hydraulic manifold and fluid sprayed over aft cabin section. Caused by failure of No. 2 boost pump and line.

**052221**—No. 1 engine failed during landing approach. Both float switches failed in "closed" position. Left forward float switch failed because float housing was bent, causing float to bend on aluminum housing. Left aft float failed because reed switch putty compound expanded, causing reed switch to move one-fourth out of its operating point.

## Selected Precautionary Landing Briefs

**F445**—No. 1 engine lost power. Caused by failure of bleed band actuator.

**F486**—Hydraulic system failed. Caused by failure of "O" ring in forward swivel actuator.

**F534**—Abnormal shuddering vibration occurred while leveling off from climb and torque needles fluctuated. Caused by malfunction of No. 1 engine fuel control unit which caused engine rpm to surge.

**F664**—No. 1 engine chip detector warning light came on. Caused by metal particles on magnetic plug.

**F799**—No. 2 engine fire warning light came on. Caused by bracket which secures fire warning circuit under combustor breaking loose from mounting, causing fire detector to sense heat and activate warning system.

**F837**—Master caution light came on and oil pressure read 10 psi. Caused by failure of upper combining transmission oil cooler elbow. Cracked fitting caused by overtorque.

**F904**—Oil low warning light came on. Caused by leak in preformed packing between temperature bulb and oil tank case. Packing improperly aligned during installation.

**F977**—Aircraft vibrated. Caused by malfunction of viscous dampner on fore and aft cyclic control.

**G267**—Unusual noises heard from forward transmission area and chip detector warning light came on. Input pinion gear retaining nut backed off. MWO required by TB 55-1560-200-40/1 not complied with.

**G310**—Vaporized hydraulic fluid leaked from control closet. Caused by chafed line in No. 1 hydraulic boost system.

**G472**—Electrical equipment malfunctioned. Caused by failure of No. 1 SAS yaw link.

**G487**—Transmission oil pressure dropped to zero and warning light came on. Caused by defective oil pressure indicator.

**G510**—No. 2 engine lost power. Caused by FOD to compressor blades.

**G722**—Aircraft vibrated excessively. Caused by broken lord mount spring on No. 7 section of synchronized drive shaft.

**G765**—Pilot heard loud pop, followed by growling noise, and felt high frequency vibration. Caused by input pinion shaft bearing retaining nut backing off, destroying aft roller bearings. Inspection of nut showed ineffective staking in that no threads had been damaged.

**H057**—Transmission oil pressure warning light came on. Caused by malfunction of selector switch.

**H154**—No. two 90° gearbox temperature rose. Caused by failure of temperature bulb.

**H254**—No. two 90° gearbox temperature rose. Caused by broken wire in cannon plug.

**H466**—Flight control hydraulic pressure lost. Caused by chafed tube assembly.

**H675**—Hydraulic fluid leaked from aft transmission compartment. Rubber grommet on adel clamp supporting line deteriorated and allowed clamp to chafe line, causing small hole.

**010519**—No. 1 rocket pod caught fire on firing run and could not be jettisoned manually or electrically. The 2.75 rocket warhead separated from rocket motor when fired, allowing motor to burn in pod. Failure to jettison caused by overtorque of azimuth aligning bolts on MA4A bomb rack, causing binding of suspension lugs.

**011016**—Forward transmission oil temperature rose to 135°. Oil cooler was clogged with straw and dirt.

**011308**—No. 1 generator inoperative. Caused by failure of electrical terminal.

**020112**—No. 1 engine would not accelerate from "ground" to "flight" position. N1 did not increase and egt rose to 900°C. Caused by fuel control failure.

**021405**—Oil leaked in aft pylon area. Caused by failure of combining gearbox oil cooler.

**022418**—No. 2 SAS was erratic in pitch and yaw. Caused by malfunction of SAS link.

**030408**—No. 1 engine failed. No. 2 bearing and second stage N<sub>2</sub> nozzle were found damaged and start fuel line broken. Suspect No. 2 nozzle was damaged by foreign object thrown through exhaust system.

**031711**—Oil leak noted in transmission area. Combining gearbox oil reservoir filler cap found open.

**031111**—Aircraft was caught in downdraft and descended rapidly from 3,500 to 1,000 feet. Transmission air cooler fan casing broke during recovery from abrupt descent, allowing drive shaft to fall against drive shaft cowl, severing drive shaft. Caused by unexpected severe turbulence.

**040420**—Transmission chip detector warning light came on. Caused by electrical short in wire at plug connection.

**042903**—Pilot felt vibrations in controls while aircraft was at 3-foot hover. Caused by failure of bolt on upper pitch change link due to improper stackup of bushings in pitch change horn. One bushing was not installed, allowing excessive play on bolt and causing it to shear.

**051111**—Accessory warning lights came on. Caused by short due to water in pylon electrical cannon plugs.

**051612**—Unusual grinding noise was heard and there was a high frequency vibration in transmission area. Caused by failure of hydraulic pump.

**062109**—Sharp shearing noise was heard from forward rotor area during landing and high vibrations felt in control pedals and cyclic, accompanied by a rubbing noise. Forward synchronized drive shaft adapter failed through bolt hole of one leg.

**062309**—Heavy three-per-revolution vertical vibration occurred. Caused by failure of mechanical linear actuator.

## Component Replacement Retirement Schedule

*This component replacement and retirement schedule is provided for information purposes only and is not to be used as a replacement or a supplement to the -20 Maintenance Manual.*

| Component                              | Part No.   | Overhaul Interval |        | Retirement Interval |
|--|------------|-------------------|--------|---------------------|
|  |            | CH-47A            | CH-47B |                     |
| Forward rotary wing drive transmission | 114D1001-1 | 150               | *      |                     |
|  | -3         | 150               | *      |                     |
|  | -6         | 150               | *      |                     |
|  | -8         | 200               | *      |                     |
|  | -10        | 200               | *      |                     |
|  | -12        | 200               | *      |                     |
|  | -13        | 200               | *      |                     |
|  | -14        | 800               | *      |                     |
|  | -15        | 200               | *      |                     |
|  | -16        | 200               | *      |                     |
|  | -17        | 400               | *      |                     |
|  | -18        | 800               | 500    |                     |
|  | -19        | 800               | 500    |                     |
|  | -20        | 800               | 500    |                     |
|  | -21        | 800               | 500    |                     |
|  | -22        | 800               | 500    |                     |
|  | -23        | 800               | 500    |                     |
|  | -25        | 800               | 500    |                     |
|  | -26        | 800               | 500    |                     |
|  | -27        | 1200              | 600    |                     |
|  | -28        | 1200              | 1200   |                     |
|  | -501       | 400               | *      |                     |
|  | -502       | 800               | 500    |                     |
|  | -516       | 800               | 500    |                     |
|  | -517       | 800               | 500    |                     |
|  | -518       | 800               | 500    |                     |
|  | -519       | 200               | *      |                     |
|  | -520       | 200               | *      |                     |
|  | -521       | 200               | *      |                     |
|  | -522       | 200               | *      |                     |
|  | -523       | 800               | *      |                     |
|  | -524       | 200               | *      |                     |
|  | -525       | 200               | *      |                     |
|  | -526       | 400               | *      |                     |
|  | -527       | 800               | 500    |                     |
|  | -528       | 800               | 500    |                     |
|  | -529       | 800               | 500    |                     |
|  | -530       | 800               | 500    |                     |
|  | -531       | 800               | 500    |                     |
|  | -532       | 800               | 500    |                     |
|  | -534       | 400               | *      |                     |
|  | -535       | 800               | 500    |                     |
|  | -550       | 800               | 500    |                     |
|  | -551       | 800               | 500    |                     |
|  | -552       | 400               | *      |                     |
|  | -553       | 400               | *      |                     |

\*Shall not be installed in the aircraft model indicated.

| Component                              | Part No.   | Overhaul Interval |        | Retirement Interval |
|--|------------|-------------------|--------|---------------------|
|  |            | CH-47A            | CH-47B |                     |
| Forward rotary wing drive transmission | 114D1200-1 | 600               | 600    |                     |
|  | -2         | 600               | 600    |                     |
|  | 114DK102-4 | 400               | *      |                     |
|  | -7         | 400               | *      |                     |
| Aft rotary wing drive transmission     | 114D2001-1 | 150               | *      |                     |
|  | -3         | 150               | *      |                     |
|  | -7         | 200               | *      |                     |
|  | -8         | 200               | *      |                     |
|  | -9         | 600               | *      |                     |
|  | -12        | 200               | *      |                     |
|  | -13        | 400               | *      |                     |
|  | -14        | 400               | *      |                     |
|  | -15        | 400               | *      |                     |
|  | -16        | 600               | *      |                     |
|  | -17        | 600               | *      |                     |
|  | -18        | 600               | *      |                     |
|  | -19        | 600               | *      |                     |
|  | -20        | 600               | *      |                     |
|  | -21        | 600               | *      |                     |
|  | -22        | 1200              | 600    |                     |
|  | -23        | 1200              | 600    |                     |
|  | -24        | 1200              | 600    |                     |
|  | -25        | 1200              | 600    |                     |
|  | -26        | 1200              | 600    |                     |
|  | -27        | 1200              | 600    |                     |
|  | -28        | 1200              | 1200   |                     |
|  | -501       | 400               | *      |                     |
|  | -502       | 600               | *      |                     |
|  | -517       | 1200              | 600    |                     |
|  | -518       | 1200              | 600    |                     |
|  | -519       | 1200              | 600    |                     |
|  | -520       | 150               | *      |                     |
|  | -521       | 150               | *      |                     |
|  | -522       | 200               | *      |                     |
|  | -523       | 200               | *      |                     |
|  | -524       | 600               | *      |                     |
|  | -525       | 200               | *      |                     |
|  | -526       | 400               | *      |                     |
|  | -527       | 400               | *      |                     |
|  | -528       | 400               | *      |                     |
|  | -529       | 600               | *      |                     |
|  | -530       | 600               | *      |                     |
|  | -531       | 600               | *      |                     |
|  | -532       | 600               | *      |                     |
|  | -533       | 600               | *      |                     |
|  | -534       | 600               | *      |                     |
|  | -535       | 1200              | 600    |                     |
|  | -536       | 1200              | 600    |                     |
|  | -537       | 1200              | 600    |                     |
|  | -538       | 400               | *      |                     |
|  | -539       | 600               | *      |                     |
|  | -554       | 1200              | 600    |                     |

\*Shall not be installed in the aircraft model indicated.

| Component                          | Part No.     | Overhaul Interval |        | Retirement Interval |
|------------------------------------|--------------|-------------------|--------|---------------------|
|                                    |              | CH-47A            | CH-47B |                     |
| Aft rotary wing drive transmission | 114D2001-555 | 1200              | 600    |                     |
|                                    | -556         | 1200              | 600    |                     |
|                                    | -557         | 400               | *      |                     |
|                                    | -558         | 600               | *      |                     |
|                                    | -559         | 600               | *      |                     |
|                                    | -560         | 1200              | 600    |                     |
|                                    | 114D2200-1   | 600               | 600    |                     |
|                                    | -2           | 600               | 600    |                     |
|                                    | 114DK102-5   | 400               | *      |                     |
|                                    | 114DK203-1   | 600               | *      |                     |
|                                    | -4           | 600               | *      |                     |
| Engine combining transmission      | 114D5001-1   | 150               | *      |                     |
|                                    | -4           | 150               | *      |                     |
|                                    | -8           | 600               | *      |                     |
|                                    | -9           | 600               | *      |                     |
|                                    | -10          | 600               | *      |                     |
|                                    | -11          | 600               | *      |                     |
|                                    | -12          | 600               | *      |                     |
|                                    | -13          | 1200              | 1200   |                     |
|                                    | -14          | 600               | *      |                     |
|                                    | -15          | 1200              | 1200   |                     |
|                                    | -16          | 1200              | 1200   |                     |
|                                    | -17          | 1200              | 1200   |                     |
|                                    | -18          | 1200              | 1200   |                     |
|                                    | -19          | 1200              | 1200   |                     |
|                                    | -20          | 1200              | 1200   |                     |
|                                    | -516         | 150               | *      |                     |
|                                    | -517         | 150               | *      |                     |
|                                    | -518         | 600               | *      |                     |
|                                    | -519         | 600               | *      |                     |
|                                    | -520         | 600               | *      |                     |
|                                    | -521         | 600               | *      |                     |
|                                    | -522         | 600               | *      |                     |
|                                    | -523         | 1200              | 1200   |                     |
|                                    | -524         | 600               | *      |                     |
|                                    | -525         | 1200              | 1200   |                     |
|                                    | -526         | 1200              | 1200   |                     |
|                                    | -527         | 1200              | 1200   |                     |
|                                    | -528         | 1200              | 1200   |                     |
|                                    | -529         | 600               | *      |                     |
|                                    | -530         | 600               | *      |                     |
|                                    | -531         | 600               | *      |                     |
|                                    | -532         | 600               | *      |                     |
|                                    | -533         | 600               | *      |                     |
|                                    | -534         | 600               | *      |                     |
|                                    | -535         | 1200              | 1200   |                     |
|                                    | 114DK504-1   | 600               | *      |                     |
|                                    | -2           | 600               | *      |                     |
|                                    | -3           | 600               | *      |                     |
|                                    | -4           | 600               | *      |                     |

\*Shall not be installed in the aircraft model indicated.

| Component                                    | Part No.   | Overhaul Interval |        | Retirement Interval |
|--|------------|-------------------|--------|---------------------|
|  |            | CH-47A            | CH-47B |                     |
| Engine combining transmission                | 114DK504-5 | 600               | *      |                     |
|  | -6         | 600               | *      |                     |
|  | -7         | 1200              | 1200   |                     |
| Engine transmission                          | 114D6001-1 | 50                | *      |                     |
|  | -3         | 50                | *      |                     |
|  | -4         | 50                | *      |                     |
|  | -5         | 50                | *      |                     |
|  | -6         | 250               | *      |                     |
|  | -7         | 400               | *      |                     |
|  | -8         | 400               | *      |                     |
|  | -9         | 400               | *      |                     |
|  | -10        | 400               | *      |                     |
|  | -11        | 400               | *      |                     |
|  | -12        | 500               | *      |                     |
|  | -13        | 400               | *      |                     |
|  | -14        | 500               | *      |                     |
|  | -15        | 1200              | *      |                     |
|  | -16        | 1200              | 1200   |                     |
|  | -17        | 1200              | 1200   |                     |
|  | -18        | 1200              | 1200   |                     |
|  | -19        | 1200              | 1200   |                     |
|  | -501       | 500               | *      |                     |
|  | -502       | 1200              | *      |                     |
|  | -503       | 1200              | 1200   |                     |
|  | -504       | 1200              | 1200   |                     |
|  | -505       | 1200              | 1200   |                     |
|  | -506       | 1200              | 1200   |                     |
|  | 114DK603-1 | 400               | *      |                     |
|  | -4         | 400               | *      |                     |
| Aft rotary wing drive shaft (vertical shaft) | 114D3002-1 | 100               | *      |                     |
|  | -3         | 100               | *      |                     |
|  | -4         | 100               | *      |                     |
|  | -5         | 1000**            | *      |                     |
|  | -6         | 1000**            | *      |                     |
|  | -7         | 1600              | 1600   |                     |
|  | -8         | 1600              | 1600   |                     |
| Synchronizing drive shaft assembly           | 114D3046-1 | 1800              | 1800   |                     |
|  | 114D3048-1 | 1800              | 1800   |                     |
|  | -5         | 1800              | 1800   |                     |
|  | -6         | 1800              | 1800   |                     |
|  | -7         | 1800              | 1800   |                     |
|  | -8         | 1800              | 1800   |                     |
|  | -9         | 1800              | 1800   |                     |
|  | 114DK300-2 | 1800              | 1800   |                     |
|  | -3         | 1800              | 1800   |                     |
|  | 114D3070-1 | 1800              | 1800   |                     |
|  | -3         | 1800              | 1800   |                     |
|  | -4         | 1800              | 1800   |                     |
|  | -5         | 1800              | 1800   |                     |
|  | -6         | 1800              | 1800   |                     |

\*Shall not be installed in aircraft model indicated.

\*\*Note: Temporary retirement intervals (Finite lives) for 114D3002-5 and -6 shaft assemblies as listed in TM 55-1520-209-20 shall be adhered to.

| Component                          | Part No.   | Overhaul Interval |        | Retirement Interval |
|------------------------------------|------------|-------------------|--------|---------------------|
|                                    |            | CH-47A            | CH-47B |                     |
| Synchronizing drive shaft assembly | 114D3070-7 | 1800              | 1800   |                     |
|                                    | -8         | 1800              | 1800   |                     |
|                                    | 114D3072-1 | 1800              | 1800   |                     |
|                                    | -3         | 1800              | 1800   |                     |
| Synchronizing drive shaft adapters | 114D3065-1 | 1800              | 1800   | 300<br><br>1200     |
|                                    | -2         | 1800              | 1800   |                     |
|                                    | 114D3067-2 |                   |        |                     |
|                                    | -3         | 1800              | 1800   |                     |
|                                    | -4         |                   |        |                     |
|                                    | -5         | 1800              | 1800   |                     |
| Engine, drive shaft assemblies     | 114D3003-1 | 1800              | 1800   |                     |
|                                    | -4         | 1800              | 1800   |                     |
| Forward rotary wing head           | 114R2001-1 | 1800              | *      |                     |
|                                    | -5         | 1800              | *      |                     |
|                                    | -7         | 1800              | *      |                     |
|                                    | -9         | 1800              | *      |                     |
|                                    | -11        | 1800              | *      |                     |
|                                    | -13        | 1800              | *      |                     |
|                                    | 114R2003-1 | *                 | 600    |                     |
| Aft rotary wing head               | 114R2001-2 | 1800              | *      |                     |
|                                    | -6         | 1800              | *      |                     |
|                                    | -8         | 1800              | *      |                     |
|                                    | -10        | 1800              | *      |                     |
|                                    | -12        | 1800              | *      |                     |
|                                    | -14        | 1800              | *      |                     |
|                                    | 114R2002-2 | 1800              | *      |                     |
|                                    | 114R2004-2 | *                 | 600    |                     |
| Forward swashplate assemblies      | 114R3304-1 | 200               | *      |                     |
|                                    | -3         | 200               | *      |                     |
|                                    | -5         | 200               | *      |                     |
|                                    | -13        | 800               | *      |                     |
|                                    | -15        | 800               | *      |                     |
|                                    | -501       | 600               | *      |                     |
|                                    | -503       | 600               | *      |                     |
|                                    | -505       | 600               | *      |                     |
|                                    | -507       | 600               | *      |                     |
|                                    | 114RK701-5 | 600               | *      |                     |
|                                    | -7         | 600               | *      |                     |
|                                    | 114R3305-1 | 800               | *      |                     |
|                                    | -3         | 800               | *      |                     |
|                                    | -5         | 800               | *      |                     |
|                                    | -7         | 800               | *      |                     |
|                                    | 114R3505-1 | *                 | 600    |                     |
|                                    | -2         | *                 | 600    |                     |

\*Shall not be installed in the aircraft model indicated.

| Component                                | Part No.     | Overhaul Interval |        | Retirement Interval |
|--|--------------|-------------------|--------|---------------------|
|  |              | CH-47A            | CH-47B |                     |
| Aft swashplate assemblies                | 114R3304-2   | 200               | *      |                     |
|  | -4           | 200               | *      |                     |
|  | -6           | 200               | *      |                     |
|  | -14          | 800               | *      |                     |
|  | -16          | 800               | *      |                     |
|  | -502         | 600               | *      |                     |
|  | -504         | 600               | *      |                     |
|  | -506         | 600               | *      |                     |
|  | -508         | 600               | *      |                     |
|  | 114RK701-6   | 600               | *      |                     |
|  | -8           | 600               | *      |                     |
|  | 114R3305-2   | 800               | *      |                     |
|  | -4           | 800               | *      |                     |
|  | -6           | 800               | *      |                     |
|  | -8           | 800               | *      |                     |
|  | 114R3505-1   | *                 | 600    |                     |
|  | -2           | *                 | 600    |                     |
| Gas turbine engine T55-L-5               | 2-000-030-09 | 1500              | *      |                     |
| Gas turbine engine T55-L-7               | 2-000-030-12 | 1800              | 1800   |                     |
| Gas turbine engine T55-L-7B              | 2-000-030-18 | 1800              | 1800   |                     |
| Gas turbine engine T55-L-7C              | 2-000-030-22 | 1800              | 1800   |                     |
| Forward rotary wing blades               | 114R1002-27  | **                | *      | 3600                |
|  | -29          | **                | *      | 3600                |
|  | -31          | **                | *      | 3600                |
|  | -33          | **                | *      | 3600                |
|  | -35          | **                | *      | 3600                |
|  | -37          | **                | *      | 3600                |
|  | 114R1502-9   | *                 | **     |                     |
| Aft rotary wing blades                   | 114R1002-28  | **                | *      | 2400                |
|  | -30          | **                | *      | 2400                |
|  | -32          | **                | *      | 2400                |
|  | -34          | **                | *      | 2400                |
|  | -36          | **                | *      | 2400                |
|  | -38          | **                | *      | 2400                |
|  | 114R1502-10  | *                 | **     |                     |
| Forward pivoting dual actuating cylinder | 114H4000-11  | 300               | *      |                     |
|  | -15          | 300               | *      |                     |
|  | -19          | 1000              | *      |                     |
|  | -21          | 300               | *      |                     |
|  | -25          | 300               | *      |                     |
|  | -27          | 1200              | *      |                     |

\*Shall not be installed in the aircraft model indicated.

\*\*On condition removal.

| Component  | Part No.    | Overhaul Interval |        | Retirement Interval |
|--|-------------|-------------------|--------|---------------------|
|  |             | CH-47A            | CH-47B |                     |
| Forward pivoting dual actuating cylinder                 | 114H4000-28 | 300               | *      |                     |
|  | -29         | 1000              | *      |                     |
|  | -31         | 1200              | *      |                     |
|  | -33         | 1200              | *      |                     |
|  | 114H6600-3  | *                 | 1200   |                     |
| Aft pivoting dual actuating cylinder                     | 114H4000-12 | 300               | *      |                     |
|  | -16         | 300               | *      |                     |
|  | -20         | 1000              | *      |                     |
|  | -24         | 300               | *      |                     |
|  | -26         | 1200              | *      |                     |
|  | -30         | 1000              | *      |                     |
|  | -32         | 1200              | *      |                     |
|  | -34         | 1200              | *      |                     |
|  | 114H6600-4  | *                 | 1200   |                     |
| Forward swiveling dual actuating cylinder                | 114H4800-7  | 1000              | *      |                     |
|  | -9          | 1000              | *      |                     |
|  | -13         | 1000              | *      |                     |
|  | -15         | 1000              | *      |                     |
|  | -17         | 1200              | *      |                     |
|  | -19         | 1200              | *      |                     |
|  | -21         | 1000              | *      |                     |
|  | -23         | 1200              | *      |                     |
|  | -25         | 1200              | *      |                     |
|  | -27         | **                | *      |                     |
|  | -29         | **                | *      |                     |
|  | 114H6700-3  | *                 | **     |                     |
| Aft swiveling dual actuating cylinder                    | 114H4800-8  | 1000              | *      |                     |
|  | -10         | 1000              | *      |                     |
|  | -14         | 1000              | *      |                     |
|  | -16         | 1000              | *      |                     |
|  | -18         | 1200              | *      |                     |
|  | -20         | 1200              | *      |                     |
|  | -22         | 1000              | *      |                     |
|  | -24         | 1200              | *      |                     |
|  | -26         | 1200              | *      |                     |
|  | -28         | **                | *      |                     |
|  | -30         | **                | *      |                     |
|  | 114H6700-4  | *                 | **     |                     |
| Forward and aft drive collar assembly                    | 114R3388-1  | **                | *      |                     |
|  | -7          | **                | *      |                     |
|  | -5          | **                | **     | 700                 |
| Forward and aft upper drive arm assembly                 | 114R3414-1  | **                | **     | 700                 |
|  | -4          | **                | **     | 700                 |
|  | -5          | **                | **     | 700                 |
| *Shall not be installed in the aircraft model indicated. |             |                   |        |                     |
| **On condition removal.                                  |             |                   |        |                     |

| Component                         | Part No.   | Overhaul Interval | Retirement Interval |
|-----------------------------------|--|-------------------|---------------------|
| Aft vertical drive shaft assembly | 114D3002-1 through -6<br>Serial No. A-102 through A-114<br>A-149 through A-151, A-154<br>A-155<br>M-103<br>M-104<br>M-106 through M-111<br>M-115<br>M-117 through M-119<br>M-121<br>M-124 through M-130<br>M-132<br>M-134<br>M-135<br>M-137 through M-143<br>M-145 through M-160<br>M-163 through M-165<br>M-167 through M-174<br>M-179<br>M-180<br>M-185<br>M-187<br>M-188<br>M-190 through M-194<br>M-197<br>M-198<br>M-200<br>M-201<br>M-203 through M-205<br>M-210<br>M-213<br>M-214<br>M-217<br>M-221<br>M-224<br>M-225 through M-227<br>M-234<br>M-236<br>M-255 through M-258<br>M-274 |                   | Finite life 600     |
| Aft vertical drive shaft assembly | 114D3002-1 through -6<br>Serial No.<br>A-118<br>M-162<br>M-166<br>M-176<br>M-182<br>M-183<br>M-189<br>M-209<br>M-218<br>M-222<br>M-223<br>M-228  |                   | Finite life 800     |

| Component                         | Part No.  | Overhaul Interval | Retirement Interval |
|-----------------------------------|---|-------------------|---------------------|
| Aft vertical drive shaft assembly | M-230 through M-232<br>M-235<br>M-237<br>M-238<br>M-240<br>M-242<br>M-246<br>M-251 through M-253  |                   |                     |
| Aft vertical drive shaft assembly | 114D3002-1 through -6<br>Serial No.<br>A-115 through A-117  |                   | Finite life 1000    |
| Aft vertical drive shaft assembly | 114D300 2-1 through-6<br>Serial No.<br>A-119 through A-148<br>A-152<br>A-153<br>A-156 through A-189<br>A-191 and subsequent "A"<br>shaft assemblies<br>M-177<br>M-178<br>M-184<br>M-186<br>M-195<br>M-196<br>M-199<br>M-202<br>M-206 through M-208<br>M-211<br>M-212<br>M-215<br>M-216<br>M-219 |                   | Finite life 1000    |
| Aft vertical drive shaft assembly | 114D3002-1 through -6<br>Serial No.<br>M-220<br>M-229<br>M-233<br>M-239<br>M-243 through M-245<br>M-247 through M-250<br>M-254<br>M-259 through M-273<br>M-275 through M-278<br>M-280<br>M-282 through M-290<br>M-292 and subsequent "M" shaft<br>assemblies                                    |                   | Finite life 1000    |

| Component  | Part No.                                       | Overhaul Interval                        | Retirement Interval |
|--|--|--|---------------------|
| Fuel filter element (T55 engine)                       | 047546   |  | 50                  |
| Gas producer turbine disc assembly (T55-L-7C only)     | 2-120-030-22                                   |  | 1200                |
| Winch cable cutter cartridge                           | TA97155  |  | 3 years             |
| Bolt, pivoting actuator to Swashplate (CH-47A only)    | NAS1308-50DW<br>or<br>BACB30LC8-50D            |  | 600 hours           |
| Bolt, upper drive arm to lower drive arm (CH-47B only) | BACB30LC6-91D                                  |  | 100 hours           |
| Bolt, upper drive arm to drive collar (CH-47B only)    | BACB30LC8-122D                                 |  | 100 hours           |
| Bolt, pivoting actuator to swashplate (CH-47B only)    | BACB30LC8-53D                                  |  | 600 hours           |
| Engine fire extinguisher bottle                        | **891635<br>**892868<br>****17300<br>****17301 | 5 years<br>5 years<br>5 years<br>5 years |                     |
| Engine fire extinguisher cartridge                     | ***841155<br>***873364                         |  | 3 years<br>3 years  |
| Nylon seat belts and shoulder harnesses                |  |  | 5 years             |

\*\*Overhaul interval is from date of manufacture or last overhaul which is stamped on the component.

\*\*\*These cartridges are installed in Kiddie Bottles P/Ns 891635 and 392868. Retirement interval is from date of manufacture which is stamped on the component.

\*\*\*\*When engine fire extinguisher system is actuated after being in service 4 years, remove and replace.

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

| Component   | Serial Number | Removal Time<br>(Usage Since New) |
|---|---------------|-----------------------------------|
| Forward rotary wing drive<br>transmission<br>(114D1001)       | A-7-48        | 400                               |
|   | A-7-49        | 400                               |
|   | A-7-68        | 400                               |
|   | M-7-2         | 400                               |
|   | M-7-5         | 400                               |
|   | A-7-18        | 800                               |
|   | A-7-21        | 800                               |
|   | A-7-26        | 800                               |
|   | A-7-36        | 800                               |
|   | A-7-65        | 800                               |
|   | A-7-83        | 800                               |
|   | A-7-90        | 800                               |
|   | A-7-185       | 800                               |
|   | M-9-6         | 400                               |
|   | M-9-9         | 400                               |
|   | A-9-36        | 400                               |
| Aft rotary wing drive<br>transmission<br>(114D2001)           | A-9-46        | 400                               |
|   | A-9-48        | 400                               |
|   | A-9-52        | 400                               |
|   | A-9-53        | 400                               |
|   | A-9-55        | 400                               |
|   | A-9-56        | 400                               |
|   | A-9-70        | 400                               |
|   | A-9-42        | 600                               |
|   | A-9-47        | 600                               |
|   | A-9-69        | 600                               |
|   | A-9-88        | 600                               |
|   | A-9-97        | 600                               |
|   | A-9-119       | 600                               |
|   | A-9-157       | 600                               |
| Engine combining trans-<br>mission (114D5001)                 | A-8-20        | 1200                              |
|   | A-8-21        | 1200                              |
|   | A-8-27        | 1200                              |
|   | A-8-35        | 1200                              |
|   | A-8-48        | 1200                              |
|   | A-8-54        | 1200                              |
|   | A-8-57        | 1200                              |
|   | A-8-78        | 1200                              |
|   | A-8-79        | 1200                              |
|   | A-8-103       | 1200                              |
|   | A-8-218       | 1200                              |
| Aft rotary wing drive shaft<br>(vertical shaft)<br>(114D3002) | M-139         | 1600                              |

| Component   | Serial Number       | Removal Time<br>(Usage Since New) |
|---|---------------------|-----------------------------------|
| Aft rotary wing head<br>controls/swashplate*<br>(114R3302, 114R3303,<br>114R3305) | A-81-46 (A-83-46)   | 300                               |
|   | A-81-40 (A-83-40)   | 600                               |
|   | A-81-41 (A-83-41)   | 600                               |
|   | A-81-51 (A-83-51)   | 600                               |
|   | A-81-52 (A-83-52)   | 600                               |
|   | A-81-122 (A-83-122) | 600                               |
|   | A-81-132 (A-83-132) | 600                               |
|   | A-81-159 (A-83-159) | 600                               |
|   | A-81-160 (A-83-160) | 600                               |
|   | A-81-232 (A-83-232) | 600                               |
|   | A-81-328 (A-83-328) | 600                               |
|   | A-83-43             | 800                               |
|   | A-81-53 (A-83-53)   | 800                               |
|   | A-81-75 (A-83-75)   | 800                               |
|   | A-81-76 (A-83-76)   | 800                               |
|   | A-81-88 (A-83-88)   | 800                               |
|   | A-81-90 (A-83-90)   | 800                               |
|   | A-81-93 (A-83-93)   | 800                               |
|   | A-81-111 (A-83-111) | 800                               |
|   | A-83-117            | 800                               |
|   | A-81-118 (A-83-118) | 800                               |
|   | A-81-124 (A-83-124) | 800                               |
|   | A-81-126 (A-83-126) | 800                               |
|   | A-81-143 (A-83-143) | 800                               |
|   | A-81-144 (A-83-144) | 800                               |
|   | A-81-145 (A-83-145) | 800                               |
|   | A-81-153 (A-83-153) | 800                               |
|   | A-81-155 (A-83-155) | 800                               |
|   | A-81-156 (A-83-156) | 800                               |
|   | A-81-161 (A-83-161) | 800                               |
|   | A-81-165 (A-83-165) | 800                               |
|   | A-81-167 (A-83-167) | 800                               |
|   | A-81-181 (A-83-181) | 800                               |
|   | A-81-182 (A-83-182) | 800                               |
|   | A-81-184 (A-83-184) | 800                               |
|   | A-81-187 (A-83-187) | 800                               |
|   | A-81-202 (A-83-202) | 800                               |
|   | A-83-206            | 800                               |

\*Serial numbers A-81-xxx denote components which were last overhauled as head controls assemblies. Serial numbers (A-83-xxx) denote swashplate assemblies contained in the corresponding head controls assemblies. The swashplate assembly is the critical component which must be removed at the time indicated.

| Component   | Serial Number | Removal Time<br>(Usage Since New) |
|---|---------------|-----------------------------------|
| Forward pivoting dual<br>actuating cylinder<br>(114H4000) | 1136          | 500                               |
|   | 1355          | 1200                              |
|   | 1401          | 1200                              |
|   | 1410          | 1200                              |
|   | 1434          | 1200                              |
|   | 1469          | 1200                              |
|   | 1594          | 1200                              |
| Aft pivoting dual<br>actuating cylinder<br>(114H4000)     | 1034          | 300                               |
|   | 1050          | 300                               |
|   | 1057          | 300                               |
|   | 1082          | 300                               |
|   | 1096          | 1200                              |
|   | 1157          | 1200                              |
|   | 1191          | 1200                              |
|   | 1230          | 1200                              |
|   | 1231          | 1200                              |
|   | 1242          | 1200                              |
|   | 1289          | 1200                              |
|   | 1290          | 1200                              |
|   | 1291          | 1200                              |
|   | 1302          | 1200                              |
|   | 1329          | 1200                              |
|   | 1332          | 1200                              |
|   | 1335          | 1200                              |
|   | 1336          | 1200                              |
|   | 1343          | 1200                              |
|   | 1345          | 1200                              |
|   | 1354          | 1200                              |
|   | 1414          | 1200                              |
|   | 1445          | 1200                              |
|   | 1456          | 1200                              |
|   | 1458          | 1200                              |
|   | 1462          | 1200                              |
|   | 1463          | 1200                              |
|   | 1505          | 1200                              |
|   | 1507          | 1200                              |
|   | 1514          | 1200                              |
|   | 1515          | 1200                              |
|   | 1533          | 1200                              |
|   | 1534          | 1200                              |
|   | 1545          | 1200                              |
|   | 1566          | 1200                              |
|   | 1567          | 1200                              |
|   | 1609          | 1200                              |
|   | 1617          | 1200                              |
|   | 1623          | 1200                              |
|   | 1643          | 1200                              |
|   | 1645          | 1200                              |
|   | 1653          | 1200                              |
|   | 1655          | 1200                              |
|   | 1678          | 1200                              |
|   | 1679          | 1200                              |
|   | 1681          | 1200                              |

| Component   | Serial Number | Removal Time<br>(Usage Since New) |
|---|---------------|-----------------------------------|
| Aft pivoting dual<br>actuating cylinder<br>(114H4000) | 1682          | 1200                              |
|   | 1694          | 1200                              |
|   | 1697          | 1200                              |
|   | 1718          | 1200                              |
|   | 1756          | 1200                              |
|   | 1762          | 1200                              |
|   | 1770          | 1200                              |
|   | 1854          | 1200                              |
|   | 2087          | 1200                              |
|   | 2141          | 1200                              |

## Active MWO's

55-1520-209-

| MWO No.           | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|---|--|--------------------|----|---------------------|----|
|                   |                        |         |   |  | Yes                | No | Yes                 | No |
| 20/1<br>Change 1  | 29 Jan 64<br>10 Jul 64 | None    | Waterproofing of overhead<br>panel disconnect                                       | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2411                         |                    | x  | x                   |    |
| 20/3<br>Change 1  | 6 Aug 63<br>11 May 64  | None    | Replacement of hydraulic<br>oil cooler motor/fan                                    | YCH-47A - 59-4985<br>JCH-47A<br>60-3448 and 60-3451<br>CH-47A - 61-2408  |                    | x  | x                   |    |
| 20/13<br>Change 1 | 14 Feb 64<br>10 Jul 64 | None    | Reidentification of rotary<br>wings   | Rotary wings<br>P/N 114R1002-1 (fwd)<br>S/N A-1-1 thru A-1-141<br>P/N 114R1002-2 (aft)<br>S/N A-2-1 thru A-2-131             |                    | x  | x                   |    |
| 20/14<br>Change 1 | 2 Dec 63<br>10 Jul 64  | None    | Marking of magnetic brake<br>mounting bolt torques                                  | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425                         |                    | x  | x                   |    |
| 20/15<br>Change 1 | 29 Jan 64<br>10 Jul 64 | None    | Color coding of SAS lines   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2413                         |                    | x  | x                   |    |
| 20/16             | 9 Jul 65               | None    | Installation of cargo ramp<br>door actuator drive shafts<br>and trolley wheel axles | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425 |                    | x  | x                   |    |
| 20/17             | 19 Mar 64              | 87      | Addition of check valve in<br>right-hand engine start<br>return line                | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2119 |                    | x  | x                   |    |

| MWO No.   | Date                               | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---|------------------------------------|---------|---|---|--------------------|----|---------------------|----|
|   |                                    |         |   |   | Yes                | No | Yes                 | No |
| 20/18<br>Change 1<br>2  | 4 Feb 65<br>11 May 65<br>27 May 65 | 106     | Addition of protective cover to SAS feedback variable resistor      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7902 |                    | x  | x                   |    |
| 20/19<br>Change 1   | 16 Jan 64<br>10 Jul 64             | None    | Replacement and inspection of screws in fairing skin on fuel pod    | CH-47A<br>59-4982 thru 62-2120  |                    | x  | x                   |    |
| 20/22<br>Change 2   | 11 Feb 64<br>29 Oct 64             | 65      | Rewiring of generator control switches                              | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3456<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7915  |                    | x  | x                   |    |
| 20/26<br>(Re-scinds DA message 36613, 2 Apr 64 & 40680, 29 Apr 64.) | 1 May 64                           | 107     | Flight control hydraulic system - replacement of SAS control valves | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2116  |                    | x  | x                   |    |
| 20/27   | 12 Oct 64                          | 87      | Replacement of hydraulic oil cooler solenoid control valve          | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7914  |                    | x  | x                   |    |
| 20/28   | 5 Aug 64                           | None    | Replacement of utility pump pressure hose assembly                  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2417  |                    | x  | x                   |    |

| MWO No.           | Date                  | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|---------|---|--|--------------------|----|---------------------|----|
|                   |                       |         |   |  | Yes                | No | Yes                 | No |
| 20/29<br>Change 1 | 2 Feb 66<br>2 May 66  | 87      | Replacement of utility<br>hydraulic system pump   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2124   | x                  |    | x                   |    |
| 20/30             | 16 Jul 64             | None    | Redesign of synchronizing<br>shaft adapter assembly   | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7902<br>63-7904 thru 63-7908                  |                    | x  | x                   |    |
| 20/31<br>Change 2 | 12 Oct 64<br>6 Aug 65 | None    | Combining an engine<br>transmission filter and<br>relief valve assemblies                     | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 thru 62-2137  |                    | x  | x                   |    |
| 20/32             | 27 Apr 65             | 145     | Replacement of Weston<br>control valve with Kemp<br>valve in cargo hook hy-<br>draulic system | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106 thru 64-13121 |                    | x  | x                   |    |
| 20/34             | 19 Mar 64             | None    | Installation of cockpit<br>panel pad  | YCH-47A<br>59-4985 and 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137   |                    | x  | x                   |    |

| MWO No.   | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---|------------------------|---------|---|---|--------------------|----|---------------------|----|
|   |                        |         |   |   | Yes                | No | Yes                 | No |
| 20/35   | 18 Nov 64              | 274     | Replacement of flight control hydraulic boost return line tubing            | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13131 |                    | x  | x                   |    |
| 20/36   | 30 Dec 65              | 208     | Replacement of emergency engine trim switches                               | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153                |                    | x  | x                   |    |
| 20/39   | 5 Jan 66               | None    | Modification of fuel vent   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13115   |                    | x  | x                   |    |
| 20/41<br>Change 3<br>(Supersedes<br>USAAV-COM<br>Message<br>SMOSM-EAC, 5-<br>1407, 19<br>May 65.) | 17 May 66<br>26 Oct 67 | 339E    | Removal of quick-disconnect couplings from transmission lubricating systems | YCH-47A<br>59-4983 thru 59-4986<br>(Kit A)<br>JCH-47A<br>60-3448 thru 60-3452<br>(Kit A)<br>CH-47A<br>61-2408 thru 61-2425<br>(Kit A)<br>62-2114 thru 62-2137<br>(Kit A)<br>63-7900 thru 63-7923<br>(Kit B)<br>64-13106<br>thru 64-13141<br>(Kit B)                     | x                  |    | x                   |    |

| MWO No.           | Date                   | ECP No.                | Title  | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|------------------------|--|--|--------------------|----|---------------------|----|
|                   |                        |                        |  |  | Yes                | No | Yes                 | No |
| 20/42<br>Change 1 | 10 Jan 66<br>8 Mar 66  | 181                    | Revised litter pole stowage installation   | CH-47A<br>63-7900 thru 63-7917   |                    | x  | x                   |    |
| 20/43             | 6 Jan 66               | None                   | Improved clamping of engine hoses  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141<br>64-13142<br>thru 64-13153   |                    | x  | x                   |    |
| 20/46             | 20 Sep 65              | 196                    | Removal of collective pitch rate controller  | CH-47A<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141   |                    | x  | x                   |    |
| 20/49<br>Change 2 | 15 Mar 66<br>10 May 67 | 371E                   | Modification of pivoting dual actuating cylinders (114H4000-19, -20, -26, and -27) | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448, 60-3449, and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2133<br>62-2135 thru 62-2137<br>63-7900 thru 63-7902<br>63-7904 thru 63-7923<br>64-13106<br>thru 64-13109<br>64-13111 thru<br>64-13165<br>65-7966 thru 65-7973 |                    | x  | x                   |    |
| 20/50             | 2 Dec 66               | SMOSM-<br>CH-47A<br>-9 | Installation of cargo hook loading pole stowage provisions                         | CH-47A<br>62-2120 and<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-7977   | x                  |    | x                   |    |

| MWO No.           | Date                  | ECP No.                | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|------------------------|---|---|--------------------|----|---------------------|----|
|                   |                       |                        |   |   | Yes                | No | Yes                 | No |
| 20/51<br>Change 2 | 28 Mar 66<br>9 Feb 67 | 391                    | Installation of cockpit<br>rear view mirror                                   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>JCH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19131 |                    | x  | x                   |    |
| 20/52<br>Change 1 | 3 Nov 66<br>9 Feb 67  | 396E                   | Addition of universal<br>mounting bracket for<br>tachometer generator         | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-109   |                    | x  | x                   |    |
| 20/53             | 25 May 66             | None                   | Replacement of forward<br>and combining transmis-<br>sion chip detector plugs | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8017   |                    | x  | x                   |    |
| 20/55             | 1 Sep 66              | AMSAV-<br>CH-47A-<br>5 | Modification kit for en-<br>gine chip detector wiring                         | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8004   |                    | x  | x                   |    |

| MWO No.  | Date      | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--|-----------|---------|---|--|--------------------|----|---------------------|----|
|  |           |         |   |  | Yes                | No | Yes                 | No |
| 20/57  | 28 Feb 68 | 423     | Replacement of forward<br>drive adapter assembly                              | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18469 |                    | x  | x                   |    |
| 20/58  | 12 Jan 68 | 374R2   | Replacement of rubber<br>generator terminal nipples<br>with fiberglass covers | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18469 |                    | x  | x                   |    |
| 20/60<br>(Super-<br>sedes<br>MWO No.<br>30/64) | 29 Dec 67 | 439     | Modification to swash-<br>plate lubrication system                            | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19063   |                    | x  | x                   |    |

| MWO No.          | Date                   | ECP No. | Title  | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|------------------|------------------------|---------|--|--|--------------------|----|---------------------|----|
|                  |                        |         |  |  | Yes                | No | Yes                 | No |
| 20/61            | 11 Sep 67              | 395R    | Removal of tunnel cover<br>strut assemblies                      | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097   |                    | x  | x                   |    |
| 20/62            | 27 Nov 67              | 534     | Installation of check<br>valve in utility hydraulic<br>system    | CH-47A<br>64-13154<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19068   |                    | x  | x                   |    |
| 30/1             | 16 Feb 66              | None    | Elimination of potential<br>binding in tunnel flight<br>controls | YCH-47A<br>59-4983 and 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>CH-47A<br>60-3451 and 60-3452<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124   |                    | x  | x                   |    |
| 30/2<br>Change 2 | 28 Jan 66<br>23 Sep 66 | 340     | Installation of XM-24<br>mounting brackets                       | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8013 | x                  |    | x                   |    |

| MWO No.           | Date                   | ECP No.                | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|------------------------|---|---|--------------------|----|---------------------|----|
|                   |                        |                        |   |   | Yes                | No | Yes                 | No |
| 30/3<br>Change 1  | 14 Apr 66<br>22 Jul 66 | 323E                   | Relocation of engine<br>cover support bracket<br>and engine start relief<br>valve | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 60-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13137   |                    | x  | x                   |    |
| 30/4              | 10 Jan 66              | 325E                   | Aft rotor shaft thrust<br>bearing filter installation                             | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153   |                    | x  | x                   |    |
| 30/5              | 21 Feb 68              | SMOSM-<br>CH-47A<br>-1 | Installation of high fre-<br>quency (AN/ARC-102)<br>radio antenna                 | CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18445  | x                  |    | x                   |    |
| 30/15<br>Change 2 | 15 Feb 66<br>11 Apr 67 | None                   | Installation of cable<br>guide in pulley assembly<br>cargo winch system           | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106 thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-071<br>66-073 thru 66-125<br>66-19000 thru 66-19097<br>66-19098 thru 67-18474 |                    | x  | x                   |    |

| MWO No.           | Date                   | ECP No. | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|--|---|--------------------|----|---------------------|----|
|                   |                        |         |  |   | Yes                | No | Yes                 | No |
| 30/16             | 27 Apr 66              | None    | Installation of emergency<br>escape axe                      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125 | x                  |    | x                   |    |
| 30/17<br>Change 1 | 24 Nov 65<br>4 Apr 66  | 258     | Installation of flight<br>control closet panel               | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-7989                       |                    | x  | x                   |    |
| 30/18<br>Change 1 | 26 Jul 66<br>22 Sep 66 | 348     | Installation of velocity<br>never exceed (VNE) com-<br>puter | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-079 |                    | x  | x                   |    |
| 30/19             | 27 Nov 67              | 232     | Installation of jettisonable<br>cabin windows                | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-097 |                    | x  | x                   |    |

| MWO No.           | Date                  | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change   |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|---------|---|--|----------------------|----|---------------------|----|
|                   |                       |         |   |  | Yes                  | No | Yes                 | No |
| 30/20<br>Change 1 | 7 Dec 67<br>28 Feb 68 | 233     | Incorporation of aft<br>jettisonable cargo door   | YCH-47A (Kits A & B)<br>59-4983 thru 59-4986<br>(Kit A)<br>JCH-47A (Kits A & B)<br>60-3448 thru 60-3452<br>CH-47A (Kits A & B)<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>CH-47A (Kit A)<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-117    | x<br>(Kit A<br>only) |    | x                   |    |
| 30/22             | 5 Jun 67              | 332     | Increase stability of one-<br>man troop seat      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-077  |                      | x  | x                   |    |
| 30/23             | 27 Dec 65             | 351     | Overhead panel disconnect<br>plug wiring bypass   | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 65-8017   |                      | x  | x                   |    |
| 30/24             | 2 Jan 68              | None    | Reinforce LH and RH<br>bellcrank support assembly | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2133<br>62-2135 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13110 |                      | x  | x                   |    |

| MWO No. | Date      | ECP No.                 | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---------|-----------|-------------------------|---|---|--------------------|----|---------------------|----|
|         |           |                         |   |   | Yes                | No | Yes                 | No |
| 30/25   | 13 Feb 68 | 177                     | Installation of hydraulic<br>test connections         | Kit A for:<br>YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13144<br>64-13146<br>thru 64-13148<br>and 64-13153<br>64-13155<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-077<br>Kit B for:<br>64-13145, 64-13149,<br>64-13151,<br>and 64-13154 | x                  |    | x                   |    |
| 30/26   | 6 Feb 68  | 303                     | Strengthening of ramp work<br>platform brace assembly | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-087   | x                  |    | x                   |    |
| 30/27   | 9 Jan 67  | SMOSM-<br>CH-47A-<br>10 | Buffer board installation                             | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-19097   | x                  |    | x                   |    |

| MWO No.                                       | Date                  | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---|-----------------------|---------|---|--|--------------------|----|---------------------|----|
|   |                       |         |   |  | Yes                | No | Yes                 | No |
| 30/28<br>(Super-<br>sedes<br>MWO No.<br>40/2) | 26 Sep 66             | 53R1    | Installation of centrifugal<br>droop stops on aft rotary<br>wing head | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-7970  | x                  |    | x                   |    |
| 30/29<br>Change 1                             | 28 Mar 66<br>3 Nov 67 | 218     | Thrust balance capsules<br>support bracket installation               | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13109  |                    | x  | x                   |    |
| 30/30<br>Change 1                             | 2 Oct 67<br>13 Nov 67 | 343     | Protective covering for<br>wiring bundles in aft<br>pylon fairing     | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19031 | x                  |    | x                   |    |
| 30/31   | 3 Nov 66              | 337     | Improve heater fuel line<br>support at station 465.0                  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19011 |                    | x  | x                   |    |

| MWO No.  | Date                   | ECP No.                | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--|------------------------|------------------------|---|--|--------------------|----|---------------------|----|
|  |                        |                        |   |  | Yes                | No | Yes                 | No |
| 30/32  | 26 Jan 67              | SMOSM-<br>CH-47A-<br>6 | Installation of pilot's and<br>copilot's microphone foot<br>switch            | CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-19091  |                    | x  | x                   |    |
| 30/34<br>Change 1  | 20 Apr 66<br>21 Jul 66 | GY79                   | Modify aft 16 x 4.4 wheels<br>to accommodate tube tires                       | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7921   |                    | x  | x                   |    |
| 30/40  | 23 May 67              | 302                    | Revise differential collec-<br>tive pitch (DCP) speed<br>trim actuator travel | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19011                             |                    | x  | x                   |    |
| 30/41<br>Change 1<br>(Super-<br>sedes<br>MWO No.<br>30/43,<br>17 May<br>1966.) | 11 May 67<br>7 Jul 67  | 370                    | Removal of rotor brake<br>system  | Kit A for:<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19028<br>Kit B for:<br>YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452 | x                  |    | x                   |    |

| MWO No.           | Date                  | ECP No.                 | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|-------------------------|---|--|--------------------|----|---------------------|----|
|                   |                       |                         |   |  | Yes                | No | Yes                 | No |
| 30/42<br>Change 1 | 9 Mar 67<br>28 Apr 67 | 290                     | Cargo hook circuit rede-<br>sign                                | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-082                              |                    | x  | x                   |    |
| 30/48             | 18 Aug 67             | 409E                    | Replace upper controls<br>hinge bolts, forward and<br>aft rotor | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19042 |                    | x  | x                   |    |
| 30/51<br>Change 1 | 28 Sep 67<br>3 Nov 67 | SMOSM-<br>CH-47A-<br>13 | Inst allation of AS-1922<br>( )/ARC antenna                     | CH-47A<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18493                           |                    | x  | x                   |    |
| 30/53             | 18 Jan 68             | 419E                    | Pop-out indicator button<br>on aft transmission<br>filter       | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097 |                    | x  | x                   |    |

| MWO No.   | Date      | ECP No.                 | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---|-----------|-------------------------|--|---|--------------------|----|---------------------|----|
|   |           |                         |  |   | Yes                | No | Yes                 | No |
| 30/53   | 18 Jan 68 | 419E                    | Pop-out indicator button<br>on aft transmission filter   | CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18459  |                    | x  | x                   |    |
| 30/55   | 17 Oct 67 | 456E                    | Modification to former<br>station 482.0 side frame   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19041                                  | x                  |    | x                   |    |
| 30/56<br>(Super-<br>sedes<br>MWO No.<br>30/14,<br>24 Feb<br>1966) | 20 Mar 67 | 315<br>and 428E         | Winch motor shaft seal<br>protection<br><div data-bbox="542 1199 735 1402" style="border: 1px solid black; padding: 5px; margin-top: 10px;">64-13146<br/>thru 64-13148<br/>64-13150<br/>64-13152<br/>and 64-13153<br/>64-13155<br/>thru 64-13165</div> | Kits A and B for:<br>CH-47A<br>62-2124 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13144<br>65-7966 thru 65-7967<br>Kit B for:<br>65-7968 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18463 | x                  |    | x                   |    |
| 30/57   | 2 Jan 68  | SMOSM-<br>CH-47A-<br>13 | Provisions for installation<br>of radio set AN/ARC-51,<br>radio set AN/ARC-54,<br>voice security equipment<br>TSEC/KY-28, and trans-<br>ponder set AN/APX-72/44  | CH-47A<br>62-2114 thru 62-2137  |                    | x  | x                   |    |
| 30/58   | 13 Jan 68 | SMOSM-<br>CH-47A-<br>13 | Provisions for installation<br>of radio set AN/ARC-54,<br>transponder set AN/APX-<br>72/44, and voice security<br>equipment TSEC/KY-28   | CH-47A<br>63-7900 thru 63-7923  |                    | x  | x                   |    |

| MWO No.           | Date                   | ECP No.   | Title  | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---|--|--|--------------------|----|---------------------|----|
|                   |                        |   |  |  | Yes                | No | Yes                 | No |
| 30/59             | 17 Nov 67              | SMOSM-<br>CH-47A-<br>13 ECP's<br>444R and<br>469R | Installation of provisions<br>for transponder set<br>AN/APX-72/44 and voice<br>security system TSEC/KY-<br>28  | CH-47A<br>64-13106<br>thru 64-13165  |                    | x  | x                   |    |
| 30/60             | 12 Jan 68              | SMOSM-<br>CH-47A-<br>13                           | Provisions for installation<br>of transponder set AN/<br>APX-72/44 and voice<br>security system TSEC/<br>KY-28 | CH-47A<br>65-7966 thru 65-8025<br>66-066 thru 66-086   |                    | x  | x                   |    |
| 30/65<br>Change 1 | 22 Mar 67<br>11 May 67 | EGG-1   | Installation of provisions<br>for aircrew armor on ALSCO<br>(PN AL 1031-3) pilot and<br>copilot seats          | CH-47A<br>65-8002 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143   |                    | x  | x                   |    |
| 30/67             | 27 Jul 67              | 489E  | Provisions for installation<br>of engine air inlet screens   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-19097<br>CH-47B<br>66-19098 thru<br>66-19116 | x                  |    | x                   |    |
| 30/68             | 8 Feb 68               | 426   | Provisions for and instal-<br>lation of T-55-L-7C engine   | CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18451   | x                  |    | x                   |    |
| 34/1<br>Change 1  | 5 Oct 63<br>10 Jul 64  | 15  | Installation of rotor blade<br>tracking provisions   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2418   | x                  |    | x                   |    |

| MWO No.                      | Date                              | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|------------------------------|-----------------------------------|---------|---|--|--------------------|----|---------------------|----|
|                              |                                   |         |   |  | Yes                | No | Yes                 | No |
| 34/2<br>Change 2             | 6 Aug 63<br>22 Jul 65             | None    | Installation of transformer<br>rectifier                                | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2418   |                    | x  | x                   |    |
| 34/7<br>Change 1             | 10 Feb 64<br>10 Jul 64            | None    | Installation of hydraulic<br>brake master cylinders<br>and pedal blocks | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2124   |                    | x  | x                   |    |
| 34/8<br>Change 1<br>Change 3 | 5 Feb 64<br>10 Jul 64<br>2 May 66 | None    | Rerouting of wheel and<br>rotor brake return lines                      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2413   |                    | x  | x                   |    |
| 34/11<br>Change 1            | 19 Jan 65<br>23 Jul 65            | 25A     | Searchlight control modi-<br>fication                                   | YCH-47A<br>59-4985 and 59-4986<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7922             |                    | x  | x                   |    |
| 34/12                        | 11 May 66                         | 27A     | Cockpit sliding doors   | YCH-47A (Kit A)<br>59-4983 thru 59-4986<br>JCH-47A (Kit A)<br>60-3448 thru 60-3452<br>CH-47A (Kit A)<br>61-2408 thru 61-2424<br>CH-47A (Kit B)<br>61-2425 and<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13113 | x                  |    | x                   |    |
| 34/13<br>Change 1            | 15 Jul 63<br>10 Jul 64            | 20      | Replacement of dual stick-<br>boost actuator                            | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 and 61-2409  |                    | x  | x                   |    |

| MWO No.           | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change         |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|---|---|----------------------------|----|---------------------|----|
|                   |                        |         |   |   | Yes                        | No | Yes                 | No |
| 34/17             | 13 Aug 64              | 33      | Addition of bleed valve to hydraulic reservoir and hydraulic oil cooler bleed lines     | YCH-47A (Kit A)<br>59-4985<br>JCH-47A (Kit A)<br>60-3448 thru 60-3452<br>CH-47A (Kit A)<br>61-2418 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2131<br>YCH-47A (Kit B)<br>59-4983, 59-4984, and<br>59-4986<br>CH-47A (Kit B)<br>61-2408 thru 61-2410<br>61-2412 thru 61-2417 |                            | x  | x                   |    |
| 34/23             | 15 Jan 65              | 42      | Aft pylon clamshell door restraining strap  | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425  |                            | x  | x                   |    |
| 34/24             | 14 Feb 64              | None    | Installation of engine transmission drive shaft and synchronizing drive shaft retainers | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425  |                            | x  | x                   |    |
| 34/26<br>Change 2 | 11 Mar 64<br>22 Sep 66 | None    | Removal of AN/ASW-12 components   | YCH-47A (Kit A)<br>59-4983 thru 59-4986<br>JCH-47A (Kit A)<br>60-3448 thru 60-3452<br>CH-47A (Kit A)<br>61-2408 and 61-2409<br>CH-47A (Kit B)<br>61-2410 thru 61-2413<br>CH-47A (Kit C)<br>61-2414 thru 61-2418   | x<br>Kits<br>A<br>and<br>B |    | x                   |    |
| 34/28<br>Change 1 | 31 Jan 64<br>10 Jul 64 | None    | Installation of auxiliary drip pan forward pylon  | YCH-47A - 59-4985<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2413  |                            | x  | x                   |    |

| MWO No.           | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|---|--|--------------------|----|---------------------|----|
|                   |                        |         |   |  | Yes                | No | Yes                 | No |
| 34/29<br>Change 1 | 26 Jul 66<br>22 Sep 66 | 311     | Installation of fuel tank connections                     | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025 |                    | x  | x                   |    |
| 34/30<br>Change 1 | 2 Jan 64<br>10 Jul 64  | None    | Replacement of magnetic brake link attaching bracket      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2416   |                    | x  | x                   |    |
| 34/35             | 27 Apr 64              | None    | Miscellaneous watertightness                              | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425   |                    | x  | x                   |    |
| 34/40             | 10 May 66              | 39      | Replacement of existing oil tank with redesigned oil tank | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137   | x                  |    | x                   |    |
| 34/41<br>Change 1 | 9 Apr 64<br>10 Jul 64  | None    | Wiring installation changes                               | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452   | x                  |    | x                   |    |
| 34/43<br>Change 1 | 28 Sep 65<br>14 Apr 66 | 48      | Installation of AFG utility hydraulic pump access door    | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425   | x                  |    | x                   |    |

| MWO No.           | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|---|---|--------------------|----|---------------------|----|
|                   |                        |         |   |   | Yes                | No | Yes                 | No |
| 34/45<br>Change 1 | 11 Dec 63<br>10 Jul 64 | None    | Modification of heater installation                                     | YCH-47A<br>59-4984 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425  | x                  |    |                     | x  |
| 34/46<br>Change 1 | 10 Feb 64<br>10 Jul 64 | None    | Modification of pilot and copilot seat assembly                         | YCH-47A (Kit A)<br>59-4983 thru 59-4986<br>JCH-47A (Kit A)<br>60-3448 thru 60-3452<br>CH-47A (Kit A)<br>61-2408 thru 61-2417<br>CH-47A (Kit B)<br>61-2418 thru 61-2425<br>62-2114 thru 62-2116                              |                    | x  | x                   |    |
| 34/47             | 7 May 65               | 87      | Replacement and rerouting of the hydraulic cooler fan motor return line | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2131                         |                    | x  | x                   |    |
| 34/48             | 29 Jan 65              | 52      | Addition of thrust magnetic brake circuit breaker                       | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7922 |                    | x  | x                   |    |
| 34/51<br>Change 1 | 22 Apr 64<br>10 Jan 68 | None    | Modification of parking brake   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2124  |                    | x  | x                   |    |
| 34/53<br>Change 1 | 14 Feb 64<br>10 Jul 64 | None    | Replacement of bushing in forward and aft rotary wing head controls     | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2421  |                    | x  | x                   |    |

| MWO No.           | Date                   | ECP No. | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|------------------------|---------|--|---|--------------------|----|---------------------|----|
|                   |                        |         |  |   | Yes                | No | Yes                 | No |
| 34/54             | 20 Nov 64              | 109     | Modification of engine<br>start and ignition system  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 61-2124<br>62-2126 thru 62-2137          |                    | x  | x                   |    |
| 34/56             | 29 Jan 65              | 101     | Dual element filter in-<br>stallation  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7905 | x                  |    | x                   |    |
| 34/57             | 15 Jan 65              | 87      | Installation of provisions<br>for depressurizing the No.<br>1 flight control hydraulic<br>system | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7911 |                    | x  | x                   |    |
| 34/58<br>Change 1 | 29 Jan 64<br>10 Jul 64 | None    | Flight controls-Removal<br>of paint from centering<br>spring shafts                              | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425  |                    | x  | x                   |    |
| 34/60             | 15 Apr 64              | None    | Modification of engine<br>access cowl hinge  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425  |                    | x  | x                   |    |

| MWO No.           | Date                  | ECP No. | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|---------|--|---|--------------------|----|---------------------|----|
|                   |                       |         |  |   | Yes                | No | Yes                 | No |
| 34/61             | 14 Apr 64             | None    | Modification of the aft<br>pylon fairing former                          | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2121  |                    | x  | x                   |    |
| 34/62<br>Change 1 | 6 Mar 64<br>6 Aug 65  | None    | Modification of forward<br>engine mounts                                 | YCH-47A<br>59-4983, 59-4984,<br>and 59-4986<br>JCH-47A<br>60-3449 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2416  |                    | x  | x                   |    |
| 34/63             | 19 Mar 64             | None    | Replacement of dual upper<br>boost-shoulder boost                        | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2416<br>61-2417 thru 61-2425<br>62-2114 and 62-2115                                   |                    | x  | x                   |    |
| 34/64             | 30 Sep 64             | None    | SAS System-Modification<br>surge accumulators and<br>drains installation | YCH-47A - Kit A<br>59-4983 thru 59-4986<br>JCH-47A - Kit A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A - Kit A<br>61-2408 thru 61-2412<br>CH-47A - Kit B<br>61-2413 thru 61-2425 | x<br>Kit B<br>Only |    | x                   |    |
| 34/68             | 17 Jan 65             | 67      | Engine starter motor re-<br>turn line replacement                        | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2417  |                    | x  | x                   |    |
| 34/69<br>Change 1 | 30 Dec 65<br>3 Mar 66 | 77R1    | Installation of yaw<br>damper and improved yaw<br>spring                 | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13113     | x                  |    | x                   |    |

| MWO No.                       | Date                                | ECP No. | Title  | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------------------|-------------------------------------|---------|--|--|--------------------|----|---------------------|----|
|                               |                                     |         |  |  | Yes                | No | Yes                 | No |
| 34/70<br>Change 1             | 2 Feb 66<br>14 Feb 68               | 116     | Modification of aft pylon<br>clamshell doors   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-7980  |                    | x  | x                   |    |
| 34/74<br>Change 1<br>Change 2 | 20 Sep 65<br>15 Oct 65<br>10 May 67 | 115     | Weight and balance<br>reference datum revision | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13116 |                    | x  | x                   |    |
| 34/75                         | 10 Feb 66                           | 61      | Installation of SAS<br>emergency release       | YCH-47A (Kit B)<br>59-4983 thru 59-4986<br>JCH-47A (Kit B)<br>60-3448 thru 60-3452<br>CH-47A (Kit A)<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13122  |                    | x  | x                   |    |
| 34/77                         | 1 Sep 65                            | 57      | Extended antiskid walk-<br>ways                | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13118  | x                  |    | x                   |    |

| MWO No.           | Date                  | ECP No. | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|-------------------|-----------------------|---------|--|---|--------------------|----|---------------------|----|
|                   |                       |         |  |   | Yes                | No | Yes                 | No |
| 34/84             | 31 Aug 64             | 105     | Replacement of extensi-<br>ble link electro-hydraulic<br>servo valve       | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137                         |                    | x  | x                   |    |
| 34/85<br>Change 1 | 11 Apr 67<br>9 Jan 68 | None    | Tunnel cover latch re-<br>tainers  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2119  | x                  |    | x                   |    |
| 34/89<br>Change 1 | 7 Apr 65<br>18 Oct 66 | None    | Installation of reservoir<br>pressure accumulator                          | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7914 | x                  |    | x                   |    |
| 34/91             | 24 Feb 65             | None    | Utility hydraulic system<br>bleed valves                                   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7914 |                    | x  | x                   |    |
| 34/92             | 16 Oct 64             | None    | Revision of engine droop<br>eliminator variable resis-<br>tor installation | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2131  |                    | x  | x                   |    |

| MWO No.            | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--------------------|------------------------|---------|---|--|--------------------|----|---------------------|----|
|                    |                        |         |   |  | Yes                | No | Yes                 | No |
| 34/95              | 21 Aug 64              | None    | Modification of the rescue hoist system                         | YCH-47A (Kits B & C)<br>59-4983 thru 59-4986<br>JCH-47A (Kits A & C)<br>60-3448 thru 60-3450<br>JCH-47A (Kits B & C)<br>60-3451 and 60-3452<br>CH-47A (Kits B & C)<br>61-2408 thru 61-2425<br>CH-47A (Kits A & C)<br>62-2114 thru 62-2121<br>62-2123 and 62-2124 |                    | x  | x                   |    |
| 34/96              | 19 Aug 64              | None    | Installation of support fittings for improved rigging procedure | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2415   |                    | x  | x                   |    |
| 34/97              | 20 Oct 64              | None    | Installation of automatic speed trim system                     | CH-47A<br>Kit B for:<br>59-4983 thru 59-4986<br>60-3448 and 60-3449<br>62-2114 thru 62-2116<br>Kit A for:<br>60-3450 thru 60-3452<br>61-2408 thru 61-2425  |                    | x  | x                   |    |
| 34/100<br>Change 3 | 11 Jan 66<br>10 Jan 68 | 68      | Rework of pilot and co-pilot seats                              | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137   | x                  |    | x                   |    |
| 34/104             | 20 May 65              | None    | Modification of beam assembly for aircraft hoisting             | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 thru 62-2137<br>63-7900 thru 63-7920   |                    | x  | x                   |    |

| MWO No.            | Date                   | ECP No. | Title                                      | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--------------------|------------------------|---------|--|---|--------------------|----|---------------------|----|
|                    |                        |         |  |   | Yes                | No | Yes                 | No |
| 34/105             | 1 Dec 65               | None    | Connecting link-thrust control             | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425  |                    | x  | x                   |    |
| 34/107             | 18 Nov 66              | 191E    | Redesign of SAS extensi-<br>ble links      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923  | x                  |    |                     | x  |
| 34/108             | 10 Feb 66              | 228E    | Modification of generator control circuit  | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923   |                    | x  | x                   |    |
| 34/109             | 5 Dec 66               | 212E    | Reinforcement for blower support structure | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7902  | x                  |    | x                   |    |
| 34/110<br>Change 3 | 24 Feb 65<br>17 Aug 66 | 131     | Modification of forward crown aft pylon    | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3450<br>and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2126 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-7980 |                    | x  | x                   |    |

| MWO No. | Date      | ECP No. | Title  | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|---------|-----------|---------|--|---|--------------------|----|---------------------|----|
|         |           |         |  |   | Yes                | No | Yes                 | No |
| 34/111  | 5 Jan 66  | 248E    | Replacement of flight control hydraulic reservoir support brackets | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13121   |                    | x  | x                   |    |
| 34/112  | 10 Jan 66 | None    | Modification of thrust bearing support, aft pylon                  | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 and 61-2409<br>61-2410 thru 64-13131  |                    | x  | x                   |    |
| 34/113  | 30 Aug 67 | 49R1    | Cabin door descent delay   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153   | not available      |    | x                   |    |
| 34/114  | 21 Apr 66 | 60R1    | Installation of modified hydraulic pump handle                     | CH-47A<br>62-2124 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153   | x                  |    | x                   |    |
| 34/115  | 13 Sep 65 | 152     | Modification of cargo hook carriage                                | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13126 |                    | x  | x                   |    |

| MWO No.            | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--------------------|------------------------|---------|---|---|--------------------|----|---------------------|----|
|                    |                        |         |   |   | Yes                | No | Yes                 | No |
| 34/116             | 27 Jun 66              | 143     | Improved ADF sense antenna  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141 | x                  |    | x                   |    |
| 34/118<br>Change 1 | 17 Jun 66<br>10 Nov 66 | 154     | Installation of flight control hydraulic return line check valves | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165 | x                  |    | x                   |    |
| 34/119             | 4 May 66               | 189     | Relocation of troop alarm and jump light                          | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137  |                    | x  | x                   |    |
| 34/121             | 11 May 67              | 123     | Windshield wiper system modification                              | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153 |                    | x  | x                   |    |
| 34/122             | 23 Feb 67              | 126     | Improved design of rescue hoist cable cutter                      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153 |                    | x  | x                   |    |

| MWO No.            | Date                   | ECP No. | Title   | Aircraft or<br>Comp Affected  | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--------------------|------------------------|---------|---|---|--------------------|----|---------------------|----|
|                    |                        |         |   |   | Yes                | No | Yes                 | No |
| 34/124<br>Change 1 | 16 Jun 67<br>28 Aug 67 | 259     | Rerouting and replacement<br>of flight control and<br>utility system hydraulic<br>lines | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141 | x                  |    | x                   |    |
| 34/125             | 14 Jun 67              | 264     | Relocation of transmission<br>lubrication hoses   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141 | x                  |    | x                   |    |
| 34/131<br>Change 1 | 29 Jul 66<br>20 Mar 67 | 201     | Deletion of engine speed<br>sensing switch  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13153 | x                  |    | x                   |    |
| 34/132             | 14 Jul 65              | 284     | Additional support for<br>defueling valve   | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13113 |                    | x  | x                   |    |
| 34/133             | 19 Apr 66              | 289E    | Strengthening of rotor<br>blade forward shear tie                                       | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13141 |                    | x  | x                   |    |

| MWO No.                                  | Date   | ECP No. | Title  | Aircraft or<br>Comp Affected   | WT & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--|--|---------|--|--|--------------------|----|---------------------|----|
|  |  |         |  |  | Yes                | No | Yes                 | No |
| 34/134                                   | 6 Aug 65   | None    | Reinforcement of the aft pivoting actuator support structure                                 | YCH-47A<br>59-4982 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13131  |                    | x  | x                   |    |
| 34/135                                   | 31 Jan 68  | 282E    | Remote indication of chips for aft rotor shaft   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165  | x                  |    | x                   |    |
| 34/137<br>Change 1                       | 26 Jul 66<br>20 Mar 67                           | 238     | Elimination of hydraulic filter bypass   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137   | unavail-<br>able   |    | x                   |    |
| 40/3<br>Change 1                         | 3 May 67<br>28 Aug 67                            | GY-71   | Improve corrosion resistance of wheel assembly (9542521) and modify wheel assembly (9543362) | CH-47A<br>63-7903, 63-7922, and<br>63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025  |                    | x  | x                   |    |
| 40/4<br>Change 1<br>Change 3<br>Change 4 | 10 Jan 66<br>11 Mar 66<br>13 Apr 67<br>16 Oct 67 | None    | Service life improvement of dual boost actuating cylinders                                   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448, 60-3449,<br>60-3451, and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2133<br>62-2135 thru 62-2137<br>63-7900 thru 63-7902<br>63-7904 thru 63-7923<br>64-13106<br>thru 64-13109<br>64-13111 thru<br>64-13165<br>65-7966 thru 65-7989 |                    | x  | x                   |    |

| MWO No.                      | Date                               | ECP No.                 | Title  | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|------------------------------|------------------------------------|-------------------------|--|--|--------------------|----|---------------------|----|
|                              |                                    |                         |  |  | Yes                | No | Yes                 | No |
| 40/8                         | 7 Jul 67                           | 333                     | Engine exhaust pipe<br>reinforcement   | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-117                            | x                  |    | x                   |    |
| 40/9<br>Change 1<br>Change 2 | 29 Nov 67<br>6 Feb 68<br>11 Apr 68 | 373                     | Retrofit of limited-life<br>parts in aft thrust bearing<br>support structure | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13131  | x                  |    | x                   |    |
| 30/9                         | 24 May 67                          | 330E                    | Installation of T-366( )/<br>ARC emergency VFH<br>transmitter provisions     | CH-47A<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-086  | x                  |    | x                   |    |
| 30/54<br>Change 1            | 27 Dec 67<br>13 Mar 68             | SMOSM-<br>CH-47A-<br>11 | Installation of ambient<br>noise filters                                     | CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000<br>thru 66-19097<br>CH-47B<br>66-19098<br>thru 66-19143<br>67-18432<br>thru 67-18493 | x                  |    | x                   |    |
| 30/86                        | 6 May 68                           | A-C0001-<br>CH-47       | Alignment holes in engine<br>control linkage                                 | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-117                            |                    | x  | x                   |    |

| MWO No.            | Date                  | ECP No. | Title   | Aircraft or<br>Comp Affected   | Wt & Bal<br>Change |    | Record<br>on 2408-5 |    |
|--------------------|-----------------------|---------|---|--|--------------------|----|---------------------|----|
|                    |                       |         |   |  | Yes                | No | Yes                 | No |
| 30/88              | 17 May 68             | 456     | Dual actuating cylinder external boot installation        | YCH-47A<br>59-4984 and 59-4985<br>JCH-47A<br>60-3451<br>CH-47A<br>61-2408 thru 61-2410<br>61-2415 thru 61-2417<br>61-2419 thru 61-2425<br>62-2114 thru 62-2118<br>62-2120 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165<br>65-7966 thru 65-8025<br>66-066 thru 66-125<br>66-19000 thru<br>66-19097 |                    | x  | x                   |    |
| 34/3               | 28 Mar 63             | 16      | Increased strength troop seat and litter installation     | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425   | x                  |    | x                   |    |
| 34/16              | 24 Feb 65             | Unknown | Modification of thrust grip assembly                      | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 and 61-2413  | x                  |    |                     | x  |
| 34/129<br>Change 2 | 15 Apr 66<br>3 Nov 67 | 153     | Engine and transmission chip detector system installation | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 thru 60-3452<br>CH-47A<br>61-2408 thru 61-2425<br>62-2114 thru 62-2137<br>63-7900 thru 63-7923<br>64-13106<br>thru 64-13165  | x                  |    | x                   |    |
| 34/130<br>Change 1 | 9 Feb 66<br>16 Jan 68 | 277E    | Addition of reinforcing rings to swashplate drive collar  | YCH-47A<br>59-4983 thru 59-4986<br>JCH-47A<br>60-3448 and 60-3449<br>60-3451 and 60-3452<br>CH-47A<br>61-2408 thru 61-2410<br>61-2412 thru 61-2425<br>62-2114 thru 62-2121<br>62-2123 and 62-2124<br>62-2127 thru 62-2137<br>63-7900 thru 63-7923  | x                  |    | x                   |    |

## Nonactive MWO's

*The following MWO's have been cancelled (C), rescinded (R), superseded (S), or have not been published (NP).*

| MWO No.              | ECP No.       | Title  |
|----------------------|---------------|--|
| 55-1520-209-20/2 (R) | None          | Installation of revised transmission oil temperature indicator and selector switch |
| -20/4 (R)            | None          | Replacement of utility hydraulic system high pressure relief valve                 |
| -20/5 (R)            | None          | Landing gear axle extension  |
| -20/6 (R)            | None          | Updating of luminous instrument range markings                                     |
| -20/7 (R)            | None          | Replace and safety engine transmission fairing retaining bolts                     |
| -20/8 (R)            | None          | Installation of transmission oil level sight gage retainer plates                  |
| -20/9 (R)            | None          | Replacement of thermal switch in utility hydraulic system                          |
| -20/10 (R)           | None          | Replacement of union on accessory gearbox valve                                    |
| -20/11 (R)           | None          | Replacement of accessory gearbox drive motor                                       |
| -20/12 (S)           | None          | Removal of rotor brake   |
| -20/20 (R)           | None          | Addition of frequency identification to emergency VHF control panel                |
| -20/21 (R)           | None          | Installation of litter pole stowage guard assemblies                               |
| -20/23 (C)           | None          | Replacement of cargo hook emergency release switch                                 |
| -20/24 (R)           | None          | Replacement of hydraulic boost control switch                                      |
| -20/25 (R)           | 87            | Replacement of the accessory gearbox motor valve                                   |
| -20/33 (C)           | 229E          | Installation of vibration isolator oil pressure transducer                         |
| -20/37 (C)           | 292           | Probe shims  |
| -20/38 (S)           | 218           | Thrust balance capsule support bracket installation                                |
| -20/40 (S)           | 310E          | Safety guard for rotor brake control switch  |
| -20/44 (S)           | 351E          | Overhead panel disconnect plug wiring bypass (See MWO No. -30/23)                  |
| -20/45 (C)           | None          | Change in a.c. circuit breaker box   |
| -20/47 (NP)          | SMOSM-CH-47-7 | Installation of aircrew armor kit  |

| MWO No.               | ECP No.         | Title  |
|-----------------------|-----------------|--|
| 55-1520-209-20/48 (C) | 351             | Revise and replace overhead control panel, electrical disconnect (See MWO -20/44)          |
| -20/54 (C)            | EGG-1           | Installation of aircrew armor plates/pilot/copilot seats                                   |
| -20/56 (NP)           | 455E            | Change of engine transmission chip detector wiring harness connector                       |
| -20/59 (NP)           | 516E            | Add engine inlet screens   |
| -30/6 (NP)            | SMOSM-CH-47A-1  | Installation of HF (AN/ARC-102) wiring harness, FY 63-64 aircraft                          |
| -30/7 (NP)            | SMOSM-CH-47A-1  | Installation of HF (AN/ARC-102) wiring harness, FY 61-62 aircraft                          |
| -30/8 (NP)            | None            | Decca installation   |
| -30/10 (NP)           | None            | Static discharge system  |
| -30/11 (NP)           | 316             | Troop commander HF and FM transmitter facility   |
| -30/12 (C)            | 40R2            | Retrofit of self-sealing fuel cells  |
| -30/13 (C)            | 26R1            | Interim anchor line kit  |
| -30/14 (S)            | 315             | Winch motor shaft seal protection  |
| -30/21 (S)            | 333             | Exhaust pipe reinforcement (See MWO No. -40/8)   |
| -30/33 (C)            | 373E            | Retrofit of limited-life parts in aft thrust bearing support structure (See MWO No. -40/9) |
| -30/35 (NP)           | SMOSM-CH-47A-12 | Gunner's interphone station (XM-24 subsystem)  |
| -30/36 (C)            | None            | Retrofit of AN/ARC-54 radio sets   |
| -30/37 (C)            | None            | Retrofit of AN/ARC radio sets  |
| -30/38 (C)            | None            | Interphone noise   |
| -30/39 (NP)           | None            | Add line filter to AN/ARC radio set  |
| -30/43 (S)            | None            | Deactivation of CH-47A rotor brake system  |
| -30/44 (NP)           | 376             | Addition of formation lights on fuselage   |
| -30/45 (NP)           | 392E            | Reduce pressure of 114HS123 engine starter relief valve                                    |

| MWO No.                | ECP No.         | Title  |
|------------------------|-----------------|--|
| 55-1520-209-30/46 (NP) | 345VE           | Combine voltage regulation and protection panel installation                                     |
| -30/47 (NP)            | 346             | Installation of emergency exit lighting system   |
| -30/49 (C)             | None            | Complete provisions for KY-28 subsystem in FY 62, 63, 64, and 65 aircraft                        |
| -30/50 (C)             | None            | Complete provisions for AN/APX-72/44 in FY 62, 63, 64, and 65 aircraft                           |
| -30/52 (NP)            | 418E            | Pop-out indicator button on the forward transmission filter                                      |
| -30/61 (NP)            | SMOSM-CH-47A-13 | Installation of complete provisions for AN/APX-72/44 in CH-47A aircraft, 66-087 through 66-19097 |
| -30/62 (NP)            | 245R2           | Installation of hydraulic pressure transmitter shock mount                                       |
| -30/63 (NP)            | 413             | Improved engine fire detection system  |
| -30/64 (C)             | 439             | Incorporate grease lubrication on swashplate assemblies (See MWO No. -20/60)                     |
| -30/66 (NP)            | 466             | Protect blade tiedown hole from erosion  |
| -30/69 (NP)            | 458             | Modify aft bellcrank support assembly  |
| -30/70 (NP)            | 459             | Aft pylon former station 502   |
| -34/4 (R)              | 73              | Droop stop replacement   |
| -34/5 (C)              | None            | Replacement of actuator damper washers   |
| -34/6 (R)              | 44              | Desensitization of yaw controls  |
| -34/9 (R)              | None            | Modification of right-hand aft work platform cowling stop  |
| -34/10 (S)             | None            | Installation of rotor brake valve  |
| -34/14 (R)             | None            | Installation of anchor points for azimuth drive of maintenance crane                             |
| -34/15 (R)             | None            | Replacement of extensible link servo-valve   |
| -34/18 (R)             | None            | Installation of an improved synchronizer assembly in external cargo hook                         |
| -34/19 (R)             | None            | Installation of balance capsule thrust control lever   |
| -34/20 (R)             | None            | Rerouting of aft pod fuel lines  |
| -34/21 (R)             | None            | Replacement of droop stop retaining bolts  |
| -34/22 (R)             | None            | Additional support for aft end of auxiliary power unit   |
| -34/25 (R)             | None            | Installation of modified aft longitudinal cyclic trim actuator                                   |

| MWO No.               | ECP No. | Title   |
|-----------------------|---------|---|
| 55-1520-209-34/27 (R) | None    | Modification of engine control system   |
| -34/31 (R)            | None    | Replacement of dual stick boost actuator pivot bolts                                    |
| -34/32 (R)            | None    | Installation of waterproof boots on forward and aft weather protective cover assemblies |
| -34/33 (R)            | None    | Installation of maintenance crane base plate attachment receptacles                     |
| -34/34 (R)            | None    | Installation of transmission check valves   |
| -34/36 (R)            | None    | Addition of viscous damper to longitudinal control                                      |
| -34/37 (R)            | None    | Modification of interphone connecting box   |
| -34/38 (R)            | None    | Replacement and reidentification of engine mechanical transmission                      |
| -34/39 (R)            | None    | Replacement of engine control link rod assemblies                                       |
| -34/42 (R)            | 35.2    | Installation of additional transmission oil cooler                                      |
| -34/44 (C)            | None    | Revision of HF antenna installation   |
| -34/49 (R)            | None    | Revision of marker beacon wiring  |
| -34/50 (R)            | None    | Installation of starter motor relief valve  |
| -34/52 (R)            | None    | Installation of camloc on lower engine access panel                                     |
| -34/55 (C)            | 90      | Installation of increased flotation landing gear  |
| -34/59 (R)            | None    | Installation of viscous damper in roll control system                                   |
| -34/65 (C)            | None    | Installation of MK8A Decca navigator  |
| -34/66 (R)            | 160     | Reinforce aft left-hand bellcrank support assembly                                      |
| -34/67 (C)            | 56      | Relocation of aft end of overhead panel   |
| -34/71 (R)            | 108     | Relocation of engine transmission oil pressure pickup                                   |
| -34/72 (R)            | 104     | SAS improvements  |
| -34/73 (R)            | None    | Installation of engine transmission and drive shaft fairing bolt retention band         |
| -34/76 (NP)           | 119     | Rerouting of aft section hydraulic lines  |
| -34/78 (C)            | 88      | Improved acoustical insulation  |
| -34/79 (C)            | 91      | Installation of aft landing gear power steering system                                  |
| -34/80 (R)            | 161     | Blade delamination repair   |

| MWO No.               | ECP No.               | Title  |
|-----------------------|-----------------------|--|
| 55-1520-209-34/81 (R) | 179                   | Rotor blade drain holes  |
| -34/82 (R)            | 180                   | Reinforcement of rotary wing blade tip cover                                     |
| -34/83 (R)            | 206                   | Blade tip rib doublers   |
| -34/86 (C)            | None                  | New fuel boost pump  |
| -34/87 (R)            | None                  | Modification of aft landing gear swivel lock                                     |
| -34/88 (C)            | None                  | New thrust magnetic brake  |
| -34/90 (C)            | 218                   | Stiffened thrust balance capsule   |
| -34/93 (C)            | 194                   | Alternate installation of Bendix gyro type 14159-1A                              |
| -34/94 (R)            | 209                   | Improved rib to spar bond  |
| -34/98 (NP)           | 26.2                  | Installation of parachute anchor line  |
| -34/99 (C)            | 87                    | Provide provisions for cold weather start APP kit                                |
| -34/101 (NP)          | 121                   | Improved APU starting to -65°  |
| -34/102 (S)           | None                  | Modification and installation of the rotor brake                                 |
| -34/103 (C)           | 192                   | Modification kit for isolated cargo floor  |
| -34/106 (R)           | None                  | Modernization modification summary   |
| -34/117 (C)           | None                  | Flight control filter-reservoir return line modification<br>(See MWO No. -20/35) |
| -34/120 (NP)          | 176                   | Utility hydraulic system return line filter, dual element                        |
| -34/123 (C)           | 175                   | Redesigned engine transmission quill shaft                                       |
| -34/126 (C)           | 140                   | Longitudinal cyclic swashplate support aft rotor head                            |
| -34/127 (C)           | 190                   | Forward rotor head (Same as MWO No. -34/126)                                     |
| -34/128 (NP)          | SMOSM<br>CH-47A-<br>2 | Installation of ARA-31 homing antenna  |
| -34/136 (C)           | 268E                  | Replacement of aft rotor shaft thrust bearing                                    |
| -34/138 (C)           | 258                   | Installation of backup structure   |
| -34/139 (C)           | None                  | Aft upper bellcrank support assembly (Replaced by<br>MWO No. -30/24.)            |
| -40/1 (C)             | LY-GT-<br>55-13       | Installation of improved No. 1 bearing, T55-L-7 engine                           |
| -40/2 (C)             | 53R1                  | Installation of centrifugal droop stop on aft rotor (See<br>MWO No. -30/28)      |

| MWO No.              | ECP No.         | Title   |
|----------------------|-----------------|---|
| 55-1520-209-40/5 (C) | SMOSM-CH-47A-8  | Structural provisions to accommodate .30 caliber critical component armor         |
| -40/6 (C)            | LSI-51250-003-1 | Replace existing diodes and one resistor and replace with higher rated components |
| -40/7 (C)            | 394             | Replace spring in engine transmission filter valve with softer spring             |
| -50/1 (R)            | 72              | Installation of broached cages in forward and aft transmissions                   |
| -50/2 (NP)           | None            | Spiral bevel pinion gear rework and sun gear bearing support bolt replacement     |

PLEASE CHECK THE APPROPRIATE BLOCK BELOW:

- AO # ☐ \_\_\_\_\_ copies are being forwarded. Indicate whether Statement A, B, C, D, E, F, or X applies.
- ☒ DISTRIBUTION STATEMENT A:  
APPROVED FOR PUBLIC RELEASE: DISTRIBUTION IS UNLIMITED
- ☐ DISTRIBUTION STATEMENT B:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES ONLY; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT C:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND THEIR CONTRACTORS; (Indicate Reason and Date). OTHER REQUESTS FOR THIS DOCUMENT SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT D:  
DISTRIBUTION AUTHORIZED TO DoD AND U.S. DoD CONTRACTORS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT E:  
DISTRIBUTION AUTHORIZED TO DoD COMPONENTS ONLY; (Indicate Reason and Date). OTHER REQUESTS SHALL BE REFERRED TO (Indicate Controlling DoD Office).
- ☐ DISTRIBUTION STATEMENT F:  
FURTHER DISSEMINATION ONLY AS DIRECTED BY (Indicate Controlling DoD Office and Date) or HIGHER DoD AUTHORITY.
- ☐ DISTRIBUTION STATEMENT X:  
DISTRIBUTION AUTHORIZED TO U.S. GOVERNMENT AGENCIES AND PRIVATE INDIVIDUALS OR ENTERPRISES ELIGIBLE TO OBTAIN EXPORT-CONTROLLED TECHNICAL DATA IN ACCORDANCE WITH DoD DIRECTIVE 5230.25. WITHHOLDING OF UNCLASSIFIED TECHNICAL DATA FROM PUBLIC DISCLOSURE. 6 Nov 1984 (indicate date of determination). CONTROLLING DoD OFFICE IS (Indicate Controlling DoD Office).
- ☐ This document was previously forwarded to DTIC on \_\_\_\_\_ (date) and the AD number is \_\_\_\_\_
- ☐ In accordance with provisions of DoD instructions, the document requested is not supplied because:
- ☐ It will be published at a later date. (Enter approximate date, if known).
- ☐ Other. (Give Reason)

DoD Directive 5230.24, "Distribution Statements on Technical Documents," 18 Mar 87, contains seven distribution statements, as described briefly above. Technical Documents must be assigned distribution statements.

Cynthia M. [Signature]  
Authorized Signature/Date

Cynthia Gleisberg  
Print or Type Name  
DSN 703 558-2924  
Telephone Number